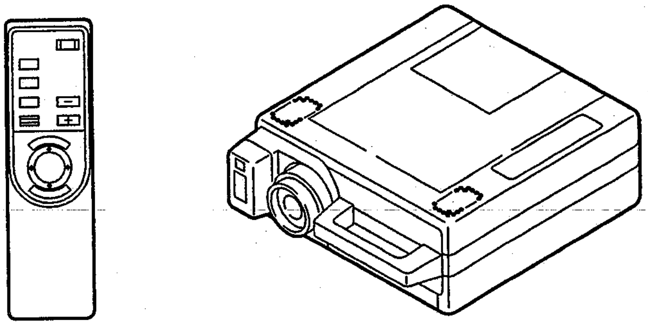
VPL-W400Q/W400QM

PK-PJ500/PSS-500/RM-PJM500

SERVICE MANUAL

VPL-W400Q
US Model
Canadian Model
VPL-W400QM
AEP Model



P D CHASSIS

MODELS OF THE SAME SERIES	
VPL-V500Q/V500QM	
VPL-W400Q/W400QM	

SPECIFICATIONS

VPL-W400Q/W400QM

Optical characteristics

Projection system	3 LCD panels, 1 lens, projection system
LCD panel	1.35-inch TFT LCD panel, 1,538,640 pixels (512, 880 pixels × 3)
Lens	1.6 times zoom lens, 11 element all glass f 50 to 80 mm/F 2.5 to 3.1
Lamp	250W, metal halide lamp
Projection picture size	16:9 screen Range: 41 to 300 inches (diagonal measure) 4:3 screen Range: 34 to 245 inches (diagonal measure)
Light output	ANSI lumen[1] 400 lm

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[1] ANSI lumen is a measuring method of American National Standard IT 7.215.

– Continued on next page –

LCD DATA PROJECTOR

SONY®

Throwing distance	16:9 screen 41-inch: 1490 to 2280 mm (58 3/4 to 83 7/8 inches) 80-inch: 3000 to 4570 mm (118 1/8 to 180 inches) 100-inch: 3770 to 5740 mm (148 1/2 to 226 1/8 inches) 200-inch: 7640 to 11590 mm (301 1/8 to 456 3/4 inches) 300-inch: 11500 to 17450 mm (452 7/8 to 687 1/8 inches)

Electrical characteristics

Color system	NTSC/PAL/SECAM/NTSC$_{4.43}$/ PAL-M system, switched automatically
Resolution	600 horizontal TV lines (VIDEO input)
Speaker	Max. 2W + 2W, 7 × 4 cm (27 5/8 × 15 3/4 inches) stereo

Input/Output

VIDEO IN	VIDEO (composite video) : BNC type 1 Vp-p ±2 dB sync negative, 75 ohms terminated S VIDEO: Mini DIN 4-pin type Y (luminance) signal : 1 Vp-p ±2 dB sync negative, 75 ohms terminated C (chrominance) signal :burst 0.286 Vp-p ±2 dB 75 ohms terminated (NTSC), 0.3 Vp-p ±2 dB 75 ohms terminated (PAL)
AUDIO IN	phono type: 500 mVrms, stereo, impedance more than 47 kilohms
INPUT-A	BNC type: Analog RGB/component: R/R-Y/P$_R$: 0.7 Vp-p ±2 dB positive, 75 ohms terminated G/Y: 0.7 Vp-p ±2 dB positive, 75 ohms terminated G with sync: 1Vp-p ±2 dB sync negative, 75 ohms terminated B/B-Y/P$_B$: 0.7 Vp-p ±2 dB positive, 75 ohms terminated C. SYNC: Composite sync: 0.6-8 Vp-p high impedance, sync negative
AUDIO IN	Phono type: 500 m Vrms, stereo impedance more than 47 kilohms
AUDIO OUT (variable out)	Phono type max. 1 Vrms, when input is 500 mVrms, impedance less than 5 kilohms
CONTROL S IN/PLUG IN POWER	Stereo minijack type: 5 Vp-p, Plug in power, DC 5 V maximum output 60 mA
CONTROL S OUT	Stereo minijack type
TRIG	Minijack type 5 Vp-p, output impedance 4.7 kilohms
Safety regulations	VPL-W400Q: UL1950, CSA950, FCC Class B, IC Class B VPL-W400QM: EN60950, TUV, CE

General

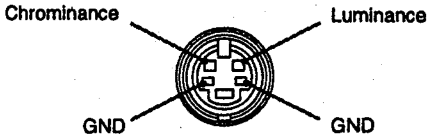
Dimensions	368 × 176 × 420 mm (14 3/8 × 7 × 16 5/8 inches) (w/h/d)
Mass	Approx. 10 kg (22 lb 1 oz)
Power requirements	VPL-W400Q: AC 100 - 120 V, 50/60 Hz[2] VPL-W400QM: AC 220 to 240 V, 50/60 Hz
Power consumption	Max. 350 W (Standby mode: 10W)
Heat dissipation	1194.4 BTU
Operating temperature	0°C to 35°C (14°F to 94°F)
Operating humidity	35% to 85% (no condensation)
Storage temperature	–20°C to 60°C (–4°F to 140°F)
Storage humidity	10% to 90%
Supplied Accessories	Remote Commander RM-PJM500 (1) Size AA (R6) batteries (2) AC Power cord (1) Lens cap (1) Operating Instructions (1)

Optional accessories

Projector Lamp PK-PJ500 (for replacement)
Projector Suspension Support PSS-500

Pin assignment

S VIDEO connector (4 pin, mini-DIN)



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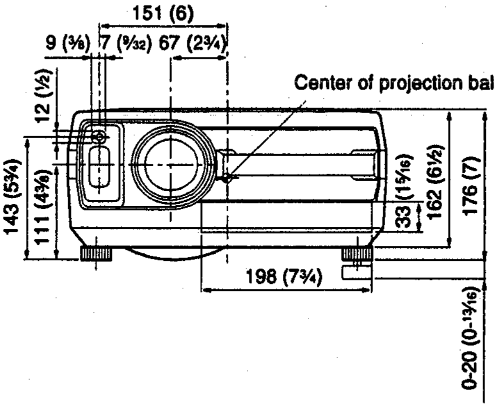
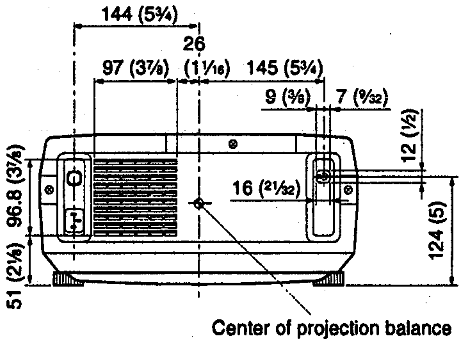
[2] 120V operation when using the projector in North America region.

Dimensions

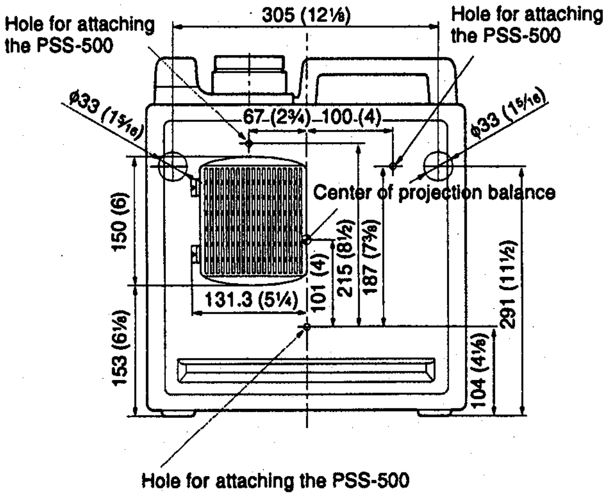
Front


151 (6)
9 (⅜)
7 (⁹⁄₃₂)
67 (2¾)
Center of projection balance
12 (½)
143 (5¾)
111 (4⅜)
33 (1⁵⁄₁₆)
162 (6½)
176 (7)
198 (7¾)
0-20 (0-¹³⁄₁₆)

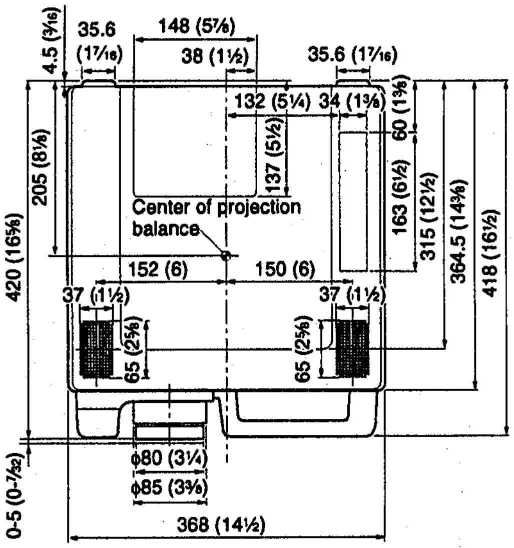
Rear


144 (5¾)
26
97 (3⅞)
(1¹⁄₁₆)
145 (5¾)
9 (⅜)
7 (⁹⁄₃₂)
12 (½)
16 (²¹⁄₃₂)
96.8 (3⅞)
51 (2⅛)
124 (5)
Center of projection balance

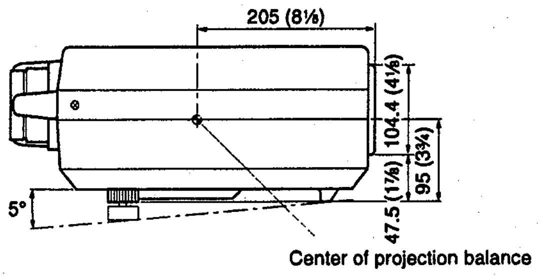
Bottom


Hole for attaching the PSS-500
305 (12⅛)
Hole for attaching the PSS-500
φ33 (1⁵⁄₁₆)
67 (2¾)
100 (4)
φ33 (1⁵⁄₁₆)
Center of projection balance
150 (6)
215 (8½)
187 (7⅜)
101 (4)
131.3 (5¼)
291 (11½)
153 (6⅛)
104 (4⅛)
Hole for attaching the PSS-500

Top


4.5 (³⁄₁₆)
35.6
(1⁷⁄₁₆)
148 (5⅞)
38 (1½)
35.6 (1⁷⁄₁₆)
132 (5¼)
34 (1⅜)
60 (1⅜)
137 (5½)
205 (8⅛)
Center of projection balance
163 (6½)
315 (12½)
364.5 (14⅜)
418 (16½)
420 (16⅝)
152 (6)
150 (6)
37 (1½)
37 (1½)
65 (2⅝)
65 (2⅝)
φ80 (3¼)
φ85 (3⅜)
0-5 (0-⁷⁄₃₂)
368 (14½)

Side


205 (8⅛)
104.4 (4⅛)
95 (3¾)
47.5 (1⅞)
5°
Center of projection balance

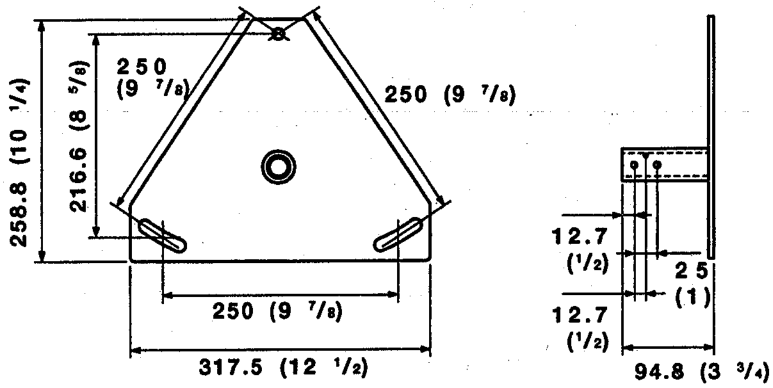
Unit: mm (inches)

PSS-500

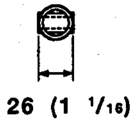
Dimensions

Upper ceiling mount bracket

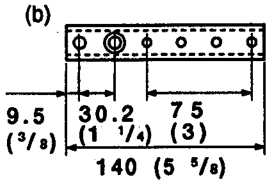
(a)


258.8 (10 1/4)
216.6 (8 5/8)
250 (9 7/8)
250 (9 7/8)
250 (9 7/8)
317.5 (12 1/2)
12.7 (1/2)
25 (1)
12.7 (1/2)
94.8 (3 3/4)

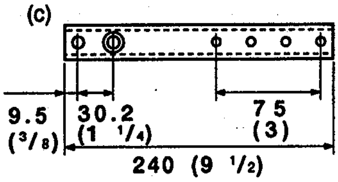
Adjustment pipes



(b)


9.5 (3/8)
30.2 (1 1/4)
75 (3)
140 (5 5/8)

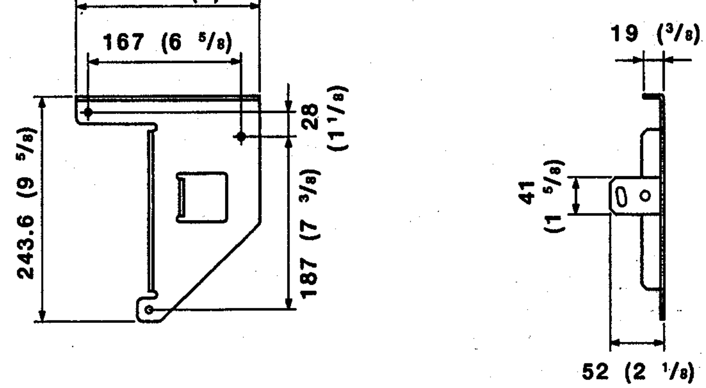
(c)


9.5 (3/8)
30.2 (1 1/4)
75 (3)
240 (9 1/2)

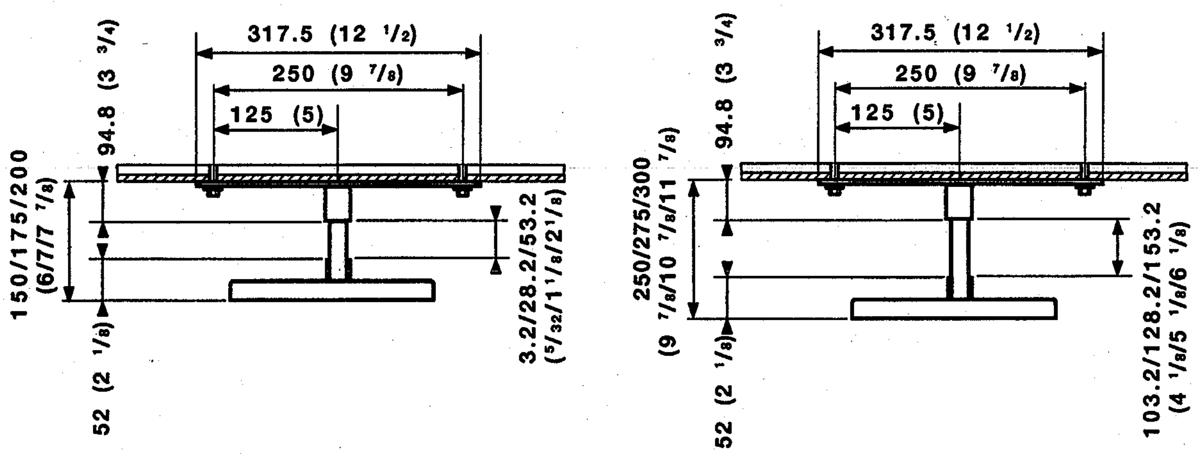
Projector mount bracket

Units : mm (inches)

(d)


201.9 (8)
167 (6 5/8)
243.6 (9 5/8)
28 (1 1/8)
187 (7 3/8)
19 (3/8)
41 (1 5/8)
52 (2 1/8)

Dimensions of the assembled bracket


317.5 (12 1/2)
250 (9 7/8)
125 (5)
94.8 (3 3/4)
150/175/200 (6/7/7 7/8)
52 (2 1/8)
3.2/28.2/53.2 (5/32/1 1/8/2 1/8)
317.5 (12 1/2)
250 (9 7/8)
125 (5)
94.8 (3 3/4)
250/275/300 (9 7/8/10 7/8/11 7/8)
52 (2 1/8)
103.2/128.2/153.2 (4 1/8/5 1/8/6 1/8)

Units : mm (inches)

Mass Approx. 3 kg (6 lb 10 oz)

Loading Maximum loading :15 kg (33 lb 1 oz)

Design and specifications are subject to change without notice.

PK-PJ500

Lamp	250 W metal halide DC lamp
Dimensions	Approx. 104 x 115 x 122 mm(w/d/h) (4 1/8 x 4 5/8 x 4 7/8 inches)
Mass	Approx. 390 g (14 oz)

Specifications are subject to change without notice.

SAFETY CHECK-OUT
(US Model only)

After correcting the original service problem, perform the following safety checks before releasing the set to the customer:

1. Check the area of your repair for unsoldered or poorly-soldered connections. Check the entire board surface for solder splashes and bridges.

2. Check the interboard wiring to ensure that no wires are "pinched" or contact high-wattage resistors.

3. Check that all control knobs, shields, covers, ground straps, and mounting hardware have been replaced. Be absolutely certain that you have replaced all the insulators.

4. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.

5. Look for parts which, though functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.

6. Check the line cords for cracks and abrasion. Recommend the replacement of any such line cord to the customer.

7. Check the B+ and HV to see if they are at the values specified. Make sure your instruments are accurate; be suspicious of your HV meter if sets always have low HV.

8. Check the metal trim, metallized knobs, screws, and all other exposed metal parts for AC leakage.
   Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5mA (500 microampers). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufactures' instructions to use these instruments.

2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.

3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

HOW TO FIND A GOOD EARTH GROUND

A cold-water pipe is guaranteed earth ground; the cover-plate retaining screw on most AC outlet boxes is also at earth ground. If the retaining screw is to be used as your earth-ground, verify that it is at ground by measuring the resistance between it and a cold-water pipe with an ohmmeter. The reading should be zero ohms. If a cold-water pipe is not accessible, connect a 60-100 watts trouble light (not a neon lamp) between the hot side of the receptacle and the retaining screw. Try both slots, if necessary, to locate the hot side of the line, the lamp should light at normal brilliance if the screw is at ground potential. (See Fig. B)

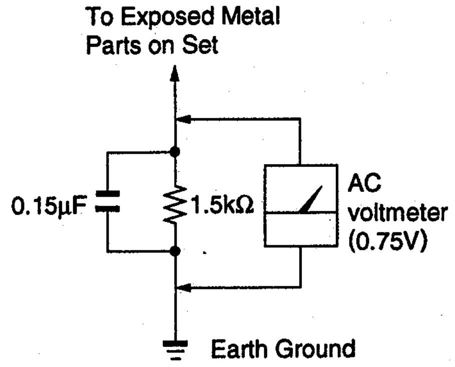


Fig. A. Using an AC voltmeter to check AC leakage.

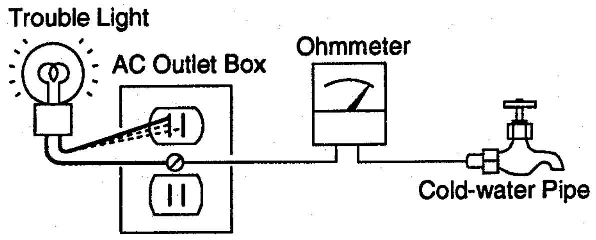


Fig. B. Checking for earth ground.

TABLE OF CONTENTS

Section *Title* *Page*

1. GENERAL

1-1. VPL-W400Q/W400QM
- Features ... 9
- Location and Function of Controls ... 9
- Installing the Projector ... 12
- Connecting with a VCR ... 13
- Projecting ... 13
- Using the menu ... 16
- The INPUT SELECT Menu ... 16
- The MEMORY SELECT Menu ... 17
- The ASPECT SELECT Menu ... 18
- The SET SETTING Menu ... 19
- The INPUT INFO Menu ... 20
- Installation Examples ... 21
- Connection Example ... 22
- Maintenance ... 22
- Troubleshooting ... 23

1-2. PSS-500 ... 24
1-3. PK-PJ500 ... 31

2. DISASSEMBLY

2-1. Hood Assy and H Board Removal ... 32
2-2. FA Board Removal ... 32
2-3. NR Board Removal ... 32
2-4. C Board Removal ... 32
2-5. B and Q Boards Removal ... 33
2-6-1. Extension Cable (1) ... 33
2-6-2. Extension Cable (2) ... 33
2-7. GA Board Removal ... 34
2-8. GB and FB Boards Removal ... 34
2-9. NF Board Removal ... 34
2-10. Optical Unit Removal ... 34

3. SET-UP ADJUSTMENTS

3-1. Polarizing Plate Adjustment ... 35
3-2. Set-up Adjustment ... 35
  1. V-COM Adjustment ... 35
  2. Single Level Adjustment ... 35
  3. White Balance (W/B) Adjustment ... 36

4. CIRCUIT ADJUSTMENTS

4-1. C Board Adjustment ... 38
  1. PLL fo Adjustment ... 38
  2. V-COM Adjustment ... 39
  3. GAIN Adjustment ... 39
  4. Signal Level Adjustment ... 39

5. DIAGRAMS

5-1. Block Diagrams ... 41
5-2. Frame Schematic Diagrams ... 59
5-3. Circuit Boards Location ... 62
5-4. Schematic Diagrams and Printed Wiring Boards ... 62
- Q Board ... 63
- B Board ... 70
- C Board ... 79
- H, NF, NR, U, V Boards ... 106
- GA Board ... 113
- GAA, GAB, GAC Boards ... 117
- GB Board ... 121
- GBA, FA, FB Boards ... 125

5-5. Semiconductors ... 128

6. EXPLODED VIEWS

6-1. Chassis 1 ... 131
6-2. Chassis 2 ... 132

7. ELECTRICAL PARTS LIST ... 133

WARNING!!

AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD, BECAUSE OF LIVE CHASSIS.
THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL FOR SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL FOR SAFE OPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.

HIGH TEMPERATURE OF THE LAMP

The temperature around the lamp became awfully high while the power on or immediately after power off.
Handle with care to not scaled.

ATTENTION!!

AFIN D'EVITER TOUT RESQUE D'ELECTROCUTION PROVENANT D'UN CHÁSSIS SOUS TENSION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISÉ LORS DE TOUT DÉPANNAGE. LE CHÁSSIS DE CE RÉCEPTEUR EST DIRECTEMENT RACCORDÉ À L'ALIMENTATION SECTEUR.

ATTENTION AUX COMPOSANTS RELATIFS À LA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIÈS PAR UNE TRAME ET PAR UNE MARQUE ⚠ SUR LES SCHÉMAS DE PRINCIPE, LES VUES EXPLOSÉES ET LES LISTES DE PIECES SONT D'UNE IMPORTANCE CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT. NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMÉRO DE PIÉCE EST INDIQUÉ DANS LE PRÉSENT MANUEL OU DANS DES SUPPLÉMENTS PUBLIÉS PAR SONY. LES RÉGLAGES DE CIRCUIT DONT L'IMPORTANCE EST CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT SONT IDENTIFIES DANS LE PRÉSENT MANUEL. SUIVRE CES PROCÉDURES LORS DE CHAQUE REMPLACEMENT DE COMPOSANTS CRITIQUES, OU LORSQU'UN MAUVAIS FONCTIONNEMENT EST SUSPECTÉ.

SECTION 1
GENERAL

The operating instructions mentioned here are partial abstracts from the Operating Instruction Manual. The page numbers of the Operating Instruction Manual remain as in the manual.

1-1. VPL-W400Q/W400QM

Features

High brightness, high picture quality

- **High brightness**
  Adopting the long service life metal halide lamp and new developed optical system allow high brightness (light output 400 ANSI lumen) and excellent uniformity on the picture.
- **High resolution**
  By using three 1.35 inch panels, this projector offers resolution of 600 horizontal TV lines for composite video input.
- **Superior color reproduction**
  The superior characteristics of the metal halide lamp and the optical design of the projector allow superior color reproduction.

High portability

This projector comes with convenient features for transportation such as a carrying handle and a Remote Commander pocket on the cabinet to keep the Remote Commander.

Wide (16:9) aspect

Thanks to the panel whose aspect ratio is 16:9, it is possible to project not only ordinary 4:3 but also 16:9 picture. In wide mode, you can enjoy other 4 picture modes, FULL/ZOOM/SUB TITLE/WIDE ZOOM, using whole 1068 × 480 pixels.
When AUTO WIDE function is set to ON, the picture is automatically set to wide mode when the letter box signal is received.

Memory function

This projector has five kinds of memory for each of VIDEO and INPUT-A input signal which stores picture condition. You can get an optimum picture by selecting the memory.

Flexible setup

This projector is designed to be installed on the table or the ceiling.
A 1.6x zoom lens is provided as standard equipment.

Accepts various input signals

You can project pictures from VCRs , 15k RGB video equipment, video cameras and HDTV[1] equipment.

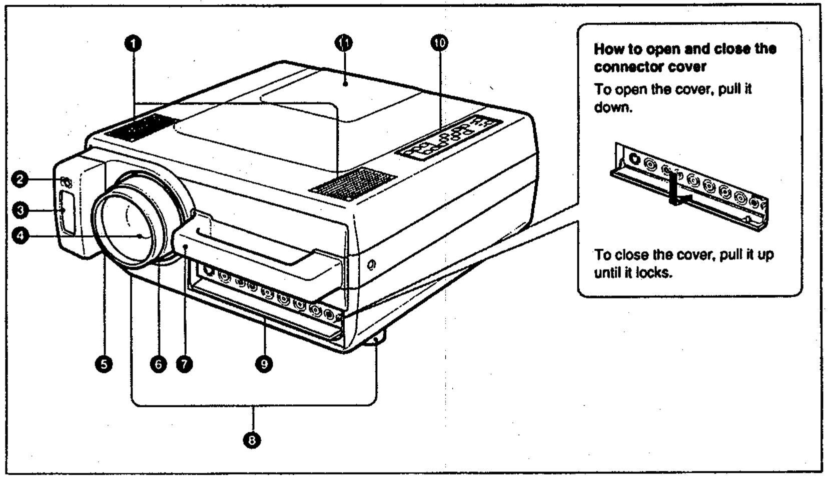
- **Compatible with five color systems**
  NTSC, PAL, SECAM, NTSC 4.43[2], or PAL-M color system can be selected automatically or manually.

---

[1] VPL-W400Q/QM accepts HDTV (1125/60) video signal.
[2] NTSC4.43 is the color system used when playing back a video recorded on NTSC on a NTSC4.43 system VCR.

Location and Function of Controls

Front


❶
⓫
❿
❷
❸
❹
❺
❻
❼
❾
❽
How to open and close the connector cover
To open the cover, pull it down.
To close the cover, pull it up until it locks.

❶ **Speakers**

❷ **Front remote control detector**

❸ **Remote Commander pocket**
Houses the supplied Remote Commander. When inserting the Remote Commander, make sure the infrared transmitter is facing forwards and push it until it clicks.
To take out the Remote Commander from the pocket, push it once and pull it out.

❹ **Lens**
Remove the lens cap before projection.

❺ **Focus ring**
Adjusts the picture focus.

❻ **Zoom ring**
Adjusts the size of the picture.

❼ **Carrying handle**
Use the handle for carrying the projector.

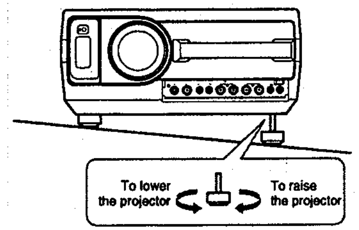
❽ **Adjusters**
Use the adjusters to keep the projector level if it is installed on an uneven surface.

❾ **Connector panel**
For details, see page 9.

❿ **Control panel**
For details, see page 8.

⓫ **Lamp cover**

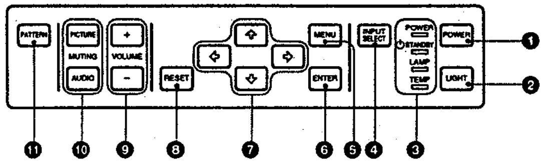
How to use the adjusters



While lifting the projector, turn the adjusters and adjust the height so that the projector becomes level.

Note
Be careful not to let the projector down on your fingers.

Control Panel



① POWER key
Press to turn the projector on and off once the projector is in the standby mode. The POWER indicator lights in green when the power is turned on.

② LIGHT key
Lights the back lighting (orange) for the control panel when the power is turned on. Press again to turn off the back lighting.

③ Indicators
POWER: Lights in green when the power is turned on.

STANDBY: Lights in red when the MAIN POWER switch at the rear of the projector is turned on. Once in the standby mode, you can turn the projector on and off with the POWER key on the control panel or the Remote Commander.

Note
When the MAIN POWER switch is turned off, there will be a slight delay before the indicator goes off.

LAMP: Lights up or flashes under the following conditions:
- Lights up when a trouble has prevented the lamp from lighting.
- Flashes when the lamp cover or air filter cover is not secured firmly.

Note
When the LAMP indicator lights up, never open the lamp cover if the projector is installed on the ceiling.

TEMP (Temperature): Lights up or flahes under the following conditions:
- Lights up when temperature inside the projector becomes unusually high.
- Flashes when the fan inside the projector stops.

For details on the LAMP and the TEMP indicators, see page 33.

④ INPUT SELECT key
Selects the input signal. Each time the key is pressed, signal from equipment connected to VIDEO IN and INPUT A connectors is selected alternately.

⑤ MENU key
Press to display the on-screen menu. Press again to clear the menu.

⑥ ENTER key
Press to enter the settings of items in the menu system.

⑦ Arrow keys (↑/↓/← /→)
Used to move the on-screen cursor or to make various adjustments.

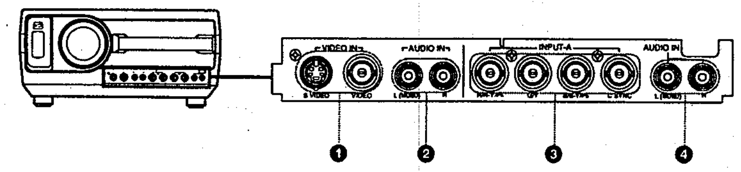
⑧ RESET key
Press to restore the value of an item back to its factory preset value. This key functions when the menu or a setting item is displayed on the screen.

⑨ VOLUME +/– keys
Adjust the volume of the built-in speakers and output level of the AUDIO OUT connectors.
+ : Increases the volume.
– : Decreases the volume.

⑩ MUTING keys
Cuts off the picture and sound.
PICTURE: Press to cut off the picture. Press again to restore the picture.
AUDIO: Press to cut off the sound. Press again or press the VOLUME + key to restore the sound.

⑪ PATTERN key
Display a pattern on the screen for focus adjustment. Press again to clear the pattern.

Connector Panel



① VIDEO IN connectors
S VIDEO (mini DIN 4-pin): Connects to the S video output (Y/C video output) of a video equipment.
VIDEO (BNC-type): Connects to the composite video output of video equipment.

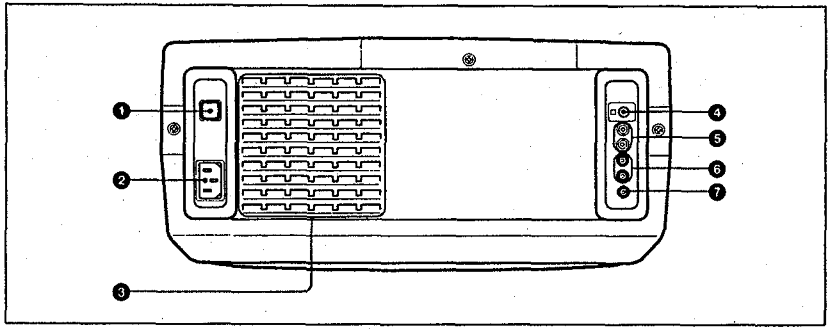
Note
If you have video equipments connected to both the S VIDEO and VIDEO connectors, the signal from the S VIDEO is selected. When showing video connected to the VIDEO connector, be sure not to connect a cable to the S VIDEO connector.

② AUDIO IN L (MONO)/R jacks (phono type)
When you connect the equipment to the VIDEO IN connectors, connect to the audio output jacks of the equipment. For stereo equipment, use both the L and R jacks; for monaural equipment, use the L (MONO) jack only.

③ INPUT-A connectors (BNC type)
R/R-Y/PR, G/Y, B/B-Y/PB, C. SYNC connectors
Connect to the RGB output of the equipment.

④ AUDIO IN L (MONO)/R jacks (phono type)
When you connect the equipment to the INPUT-A connectors, connect to the audio output jacks of the equipment. For stereo equipment, use both the L and R jacks; for monaural equipment, use the L (MONO) jack only.

Rear



❶ MAIN POWER switch (▬ON/■OFF)
Turns the main power on and off.

❷ AC IN socket
Connect the supplied AC Power cord.

Note
If the supplied AC power cord plug does not match the wall socket in your country, consult qualified Sony personnel.

❸ Ventilation holes

Note
Do not place anything near the ventilation holes as it may cause internal heat build-up.

❹ Rear remote control detector

❺ AUDIO OUT L/R jacks (phono type)
Connects to external active speakers.
The volume of the speakers can be controlled by the VOLUME keys on the projector or the Remote Commander.

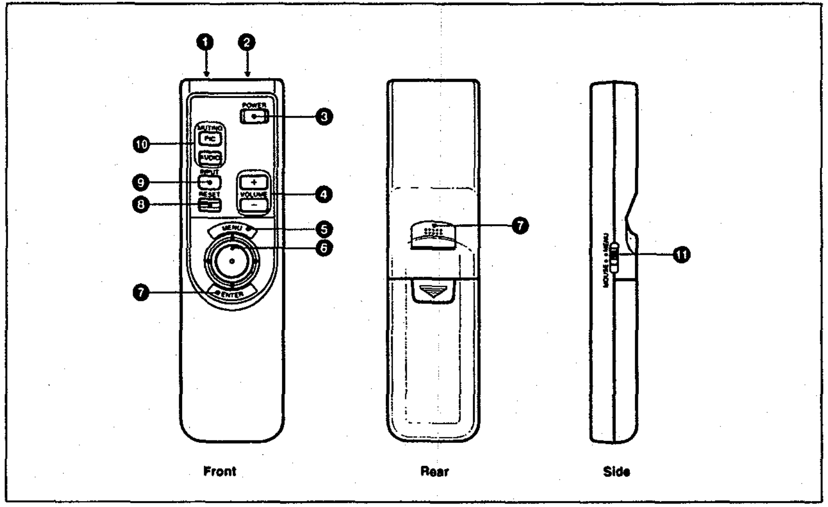
❻ CONTROL S IN/OUT jack (stereo minijack)
Connect to the CONTROL S connectors of other Sony equipment. It is then possible to control the whole system with a single Remote Commander.

❼ TRIG (trigger) connector (minijack)
Outputs the ON or OFF condition of the unit to the external equipment.
When the unit is turned off, 0 V is output and when the unit is turned on, 5 V is output. However, as the power is not output, you cannot use the connector as the power source.

Remote Commander

The Remote Commander may be used as a wireless or wired Remote Commander.

For details on operation of the keys not mentioned here, see the description in the Control Panel section.



❶ CONTROL S OUT connector (stereo minijack)
Connect to the CONTROL S IN connector on the projector when using the Remote Commander as a wired Remote Commander.

❷ Infrared transmitter

❸ POWER key

❹ VOLUME +/– keys

❺ MENU key

❻ Joy stick
Used to move the on-screen cursor or to make various adjustments.

❼ ENTER keys

❽ RESET key

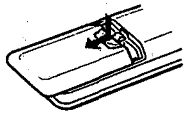
❾ INPUT key

❿ MUTING keys

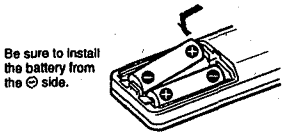
⓫ MOUSE/MENU switch
Set to MENU for this unit.

Battery installation

1 Push and slide to open the lid.



2 Install the two size AA (R6) batteries (supplied) with the correct polarity.


Be sure to install the battery from the ⊖ side.

3 Replace the lid.

Notes on batteries

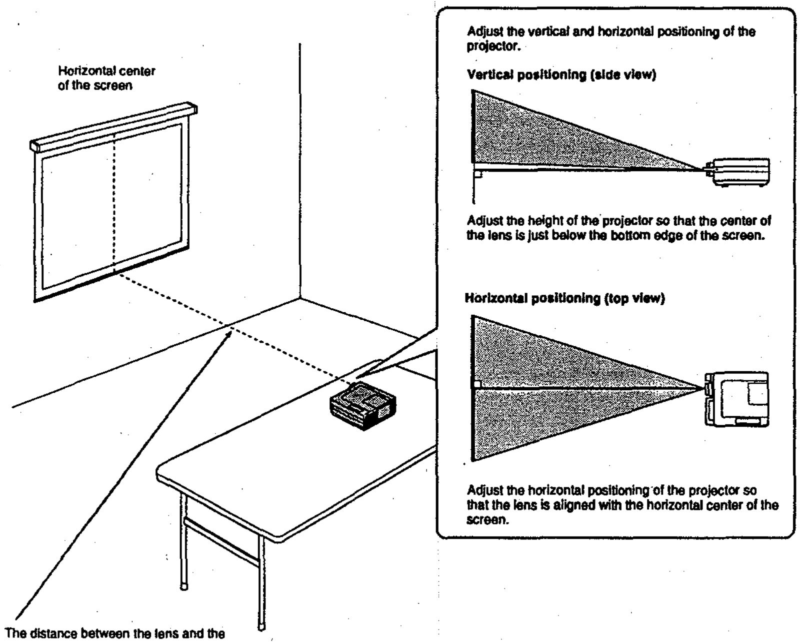
- Be careful that the battery orientation is correct when inserting batteries.
- Do not mix old battery with new one, or different types of batteries.
- If you do not intend to use the Remote Commander for a long time, remove the batteries to avoid damage from battery leakage. If a battery has leaked, remove the batteries, wipe the battery compartment dry and replace the batteries with new ones.

Notes on wireless Remote Commander operation

- Be sure that there is nothing to obstruct the infrared beam between the Remote Commander and the projector.
- The operation range is limited. The shorter the distance between the Remote Commander and the projector, the wider the angle within which the commander can control the projector.
- The remote control detectors on the projector do not operate when the Remote Commander is being used as a wired Remote Commander. If you wish to use the Remote Commander as a wireless Remote Commander, be sure to remove the connecting cable from both the Remote Commander and the projector.

Installing the Projector

This section describes the installation arrangements for installing the projector on a table. For ceiling installation, consult with qualified Sony personnel (see page 31).


Horizontal center of the screen
Adjust the vertical and horizontal positioning of the projector.
Vertical positioning (side view)
Adjust the height of the projector so that the center of the lens is just below the bottom edge of the screen.
Horizontal positioning (top view)
Adjust the horizontal positioning of the projector so that the lens is aligned with the horizontal center of the screen.

The distance between the lens and the screen varies depending on the size of the screen. Use the following table as a guide.

Unit: m (feet)

16:9 screen size (inches)		41	60	80	100	120	150	180	200	250	300
Distance	Minimum	1.5 (4.9)	2.2 (7.3)	3.0 (9.8)	3.8 (12.4)	4.5 (14.9)	5.7 (18.7)	6.9 (22.5)	7.6 (25.1)	9.6 (31.4)	11.5 (37.7)
	Maximum	2.3 (7.5)	3.4 (11.2)	4.6 (15.0)	5.7 (18.8)	6.9 (22.7)	8.7 (28.4)	10.4 (34.2)	11.6 (38.0)	14.5 (47.6)	17.5 (57.3)

4:3 screen size (inches)		34	60	80	100	120	150	180	200	245
Distance	Minimum	1.5 (5.0)	2.7 (9.0)	3.7 (12.1)	4.6 (15.2)	5.6 (18.3)	7.0 (23.0)	8.4 (27.6)	9.4 (30.7)	11.5 (37.7)
	Maximum	2.3 (7.6)	4.2 (13.7)	5.6 (18.4)	7.1 (23.1)	8.5 (27.8)	10.6 (34.9)	12.8 (41.9)	14.2 (46.6)	17.4 (57.2)

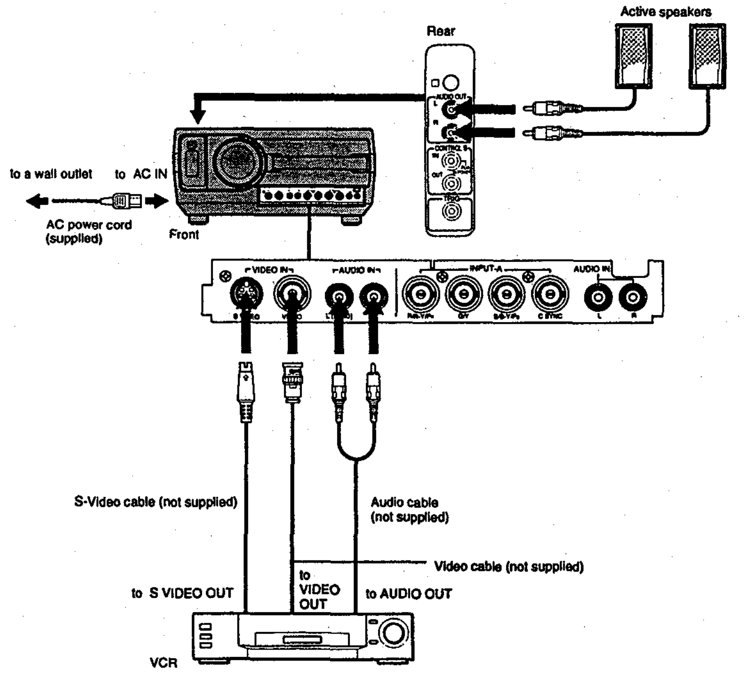
For detailed information on installation measurements, see page 30.

Connecting with a VCR

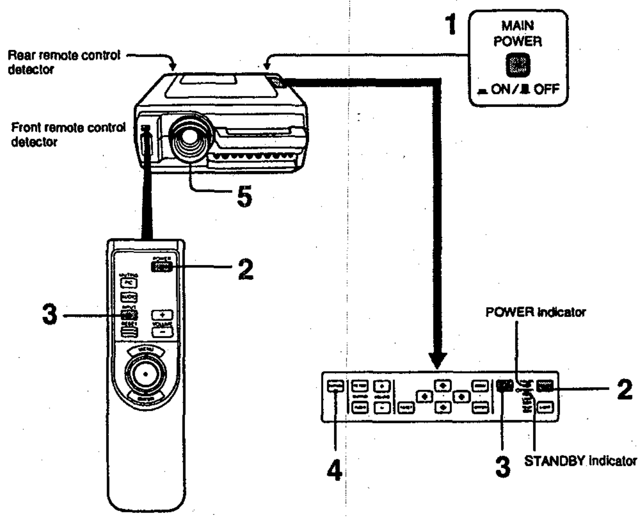
This section describes how to connect the projector with a VCR and external active speakers. For details on how to connect other equipment, see page 32.
Also refer to the instruction manuals of the equipment to be connected.

When making connections, be sure to:

- turn off all equipment before making any connections.
- use the proper cables for each connection.
- insert the plugs of the cables properly; plugs that are not fully inserted often generate noise. When pulling out a cable, be sure to pull it out from the plug, not the cable itself.


Active speakers
Rear
AUDIO OUT
L
R
CONTROL S
IN
OUT
to a wall outlet
to AC IN
AC power cord (supplied)
Front
VIDEO IN
AUDIO IN
INPUT-A
AUDIO IN
L
R
S-Video cable (not supplied)
Audio cable (not supplied)
Video cable (not supplied)
to S VIDEO OUT
to VIDEO OUT
to AUDIO OUT
VCR

Projecting


1
MAIN POWER
▬ ON/■ OFF
Rear remote control detector
Front remote control detector
5
2
3
POWER indicator
2
4
3
STANDBY indicator

1 Press the MAIN POWER switch on the rear of the projector (▬ ON).

The STANDBY indicator lights in red and the projector goes into the standby mode.

2 Press the POWER key on the Remote Commander or the control panel.

The POWER indicator lights in green.

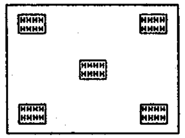
3 Switch on equipment connected to the projector. Press the INPUT SELECT key on the control panel or the INPUT key on the Remote Commander to select the input source.

INPUT-A: Selects signal input from the INPUT-A and AUDIO IN L/R connectors.

VIDEO: Selects signal input from the VIDEO IN and AUDIO IN L/R connectors.
(If you have made connections to both the S VIDEO and the VIDEO connectors, the signal from S VIDEO connector is selected.)

(continued)

4 Press the PATTERN key on the control panel to display the "H" test pattern, and turn the focus ring to adjust the focus.



Press the PATTERN key again to clear the pattern.

5 Turn the zoom ring to adjust the size of the picture.

Note
Do not look into the lens when the projector lamp is on.

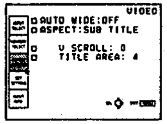
To	Press
Adjust the volume	the VOLUME +/– keys.
Cut off the sound	the AUDIO MUTING key. To restore the sound, press the AUDIO MUTING key again or press the VOLUME + key.
Cut off the picture	the PICTURE MUTING key (PIC MUTING key on the Remote Commander). To restore the picture, press the PICTURE MUTING key again.

Changing the picture mode

You can change the picture mode according to the picture to be used or the video signal.

1 Press the MENU key to display the menu.

2 Press the ♠/♣ keys on the control panel to select ASPECT SELECT, then press the ➡ key or the ENTER key.



VIDEO
AUTO WIDE:OFF
ASPECT:SUB TITLE
V SCROLL: 0
TITLE AREA: 4

3 Make setting or adjustment on an item.

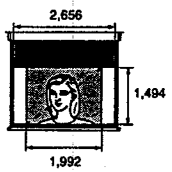
For details on setting individual items, see page 24.

The picture size for the screen size

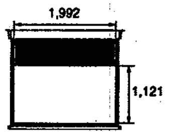
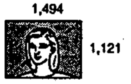
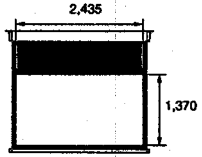
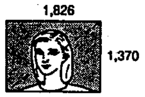
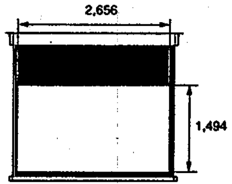
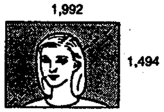
Refer to the followings for selecting the screen mode.

When the 4:3 picture is displayed on the 16:9 screen

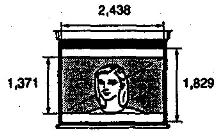
Example: The 120 inch screen is used.



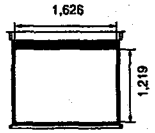
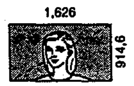
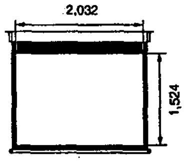
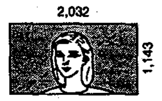
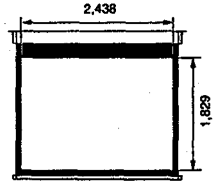
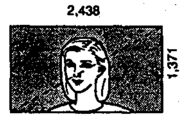
The 98 inch picture is displayed.

size (inch)	16:9 screen	4:3 picture	size (inch)
	unit: mm	unit: mm	
90			73
110			90
120			98

When the 16:9 picture is displayed on the 4:3 screen
Example: The 120 inch screen is used.



The 110 inch picture is displayed.

	4:3 screen	16:9 picture	
size (inch)	unit: mm	unit: mm	size (inch)
80	 1,626 1,219	 1,626 914.6	73
100	 2,032 1,524	 2,032 1,143	91
120	 2,438 1,829	 2,438 1,371	110

To turn off the power

1 Press the POWER key on the control panel or the Remote Commander.

The fan continues to run for about 10 minutes to reduce the internal heat. You cannot turn on the power again for about one minute although the POWER indicator lights in green. After about one minute, you can turn on the power with the POWER key.

2 Wait until the fan stops running and the STANDBY indicator lights in red; then press the MAIN POWER switch to turn off the main power (■ OFF).

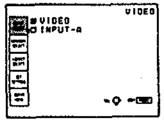
Notes

- **Do not to press the MAIN POWER switch while the fan is still running; the fan will stop while the lamp is still hot, leading to breakdown.**
- **To make the lamp life last longer, do not turn off the power at least for about 10 minutes after turning on the power.**

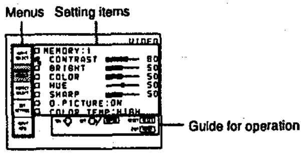
Using the menu

The projector is equipped with an on-screen menu for making various adjustments and settings.
To select the language used in the menu, see page 27.

1 Press the MENU key.
The menu display appears.
The menu presently selected is highlighted in blue.


VIDEO
VIDEO
INPUT-A

2 Use the ↑ or ↓ keys on the control panel to select a menu, then press the → key or the ENTER key. On the Remote Commander, move the joy stick up or down to select a menu, then move it to the right or press the ENTER key.
The selected menu appears.


Menus
Setting items
Guide for operation
VIDEO
MEMORY:1
CONTRAST
BRIGHT
COLOR
HUE
SHARP
D.PICTURE:ON
COLOR TEMP:HIGH

3 Make setting or adjustment on an item.
For details on setting individual items, see the relevant menu pages.

To clear the menu display

Press the MENU key.
The menu display disappears automatically if no key is pressed for one minute.

To reset items that have been adjusted

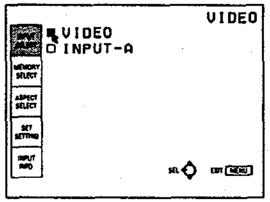
Press the RESET key. "RESET complete!" appears on the screen and the settings appearing on the screen will be reset to their factory preset values.

About the memory of the settings

The settings are automatically stored in the projector memory.

The INPUT SELECT Menu

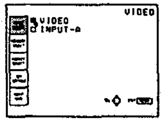
The INPUT SELECT menu is used for selecting the input signal.


VIDEO
VIDEO
INPUT-A
MEMORY SELECT
ASPECT SELECT
SET SETTING
INPUT INFO
SEL
EXIT MENU

Operation
Use the ↑ or the ↓ key on the control panel to select the input, then press ← key.
On the Remote Commander, move the joy stick up or down to select the input, then move it to the left.

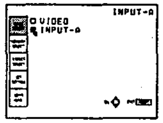
VIDEO

Selects signal input from the VIDEO IN (S VIDEO or VIDEO) connectors and the AUDIO IN L/R (for VIDEO IN) connectors. If you have equipment connected to both the VIDEO and the S VIDEO connectors, the S VIDEO will be selected.


VIDEO
VIDEO
INPUT-A

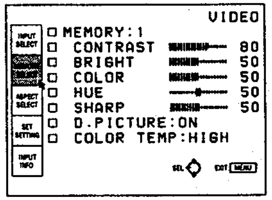
INPUT-A

Selects signal input from the INPUT-A and AUDIO IN L/R (for INPUT-A) connectors.


INPUT-A
VIDEO
INPUT-A

The MEMORY SELECT Menu

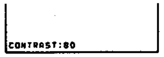
The MEMORY SELECT menu is used for adjusting the picture. Items which can be adjusted are displayed in green.


VIDEO
INPUT SELECT
ASPECT SELECT
SET SETTING
INPUT INFO
☐ MEMORY: 1
☐ CONTRAST 80
☐ BRIGHT 50
☐ COLOR 50
☐ HUE 50
☐ SHARP 50
☐ D.PICTURE:ON
☐ COLOR TEMP:HIGH
SEL
EXIT MENU

Operation

When changing the adjustment level:

1. Select an item.
Use the ↑ or the ↓ key on the control panel to select an item, then press the → or the ENTER key.
On the Remote Commander, move the joy stick up or down to select an item, then move it to the right or press the ENTER key.
The selected item is dislayed at the bottom.

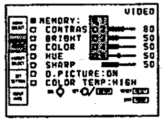

CONTRAST:80

2. Change the adjustment level.
To increase the number, press the ↑ or the → key.
On the Remote Commander, move the joy stick up or to the right.
To decrease the number, press the ↓ or the ← key.
On the Remote Commander, move the joy stick down or to the left.
Adjustable range is MIN, 1, 2, ... 98, 99, MAX.

3. Press the ENTER key to restore the original screen.
The original screen is restored.

When changing the setting:

1. Select an item.
Use the ↑ or the ↓ key on the control panel to select an item, then press the → or the ENTER key.
On the Remote Commander, move the joy stick up or down to select an item, then move it to the right or press the ENTER key.
The pop-up menu for the selected item appears.

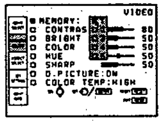

VIDEO
MEMORY:
CONTRAS 80
BRIGHT 50
COLOR 50
HUE 50
SHARP 50
D.PICTURE:ON
COLOR TEMP:HIGH

2. Change the setting.
Press the ↑ or the ↓ key on the control panel.
On the Remote Commander, move the joy stick up or down.

3. Press the ENTER or the ← key on the control panel to restore the original screen.
On the Remote Commander, press the ENTER key or move the joy stick to the left.

MEMORY

Selects the memory number.


VIDEO
MEMORY:
CONTRAS 80
BRIGHT 50
COLOR 50
HUE 50
SHARP 50
D.PICTURE:ON
COLOR TEMP:HIGH

The adjusted data are memorized in MEMORY 1 to 5 for each of VIDEO IN and INPUT-A.

CONTRAST

Adjusts the picture contrast.

CONTRAST:80

The higher the setting, the greater the contrast.
The lower the setting, the lower the contrast.

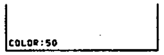
BRIGHT

Adjusts the picture brightness.

The higher the setting, the brighter the picture.
The lower the setting, the darker the picture.

COLOR

Adjusts color intensity.



The higher the setting, the greater the intensity.
The lower the setting, the lower the intensity.

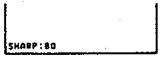
HUE

Adjusts skin tones.

A higher the setting, the picture becomes greenish.
A lower the setting, the picture becomes purplish.

SHARP

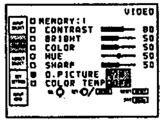
Adjusts the picture sharpness.



The higher the setting, the sharper the picture.
The lower the setting, the softer the picture.

D. (Dynamic) PICTURE

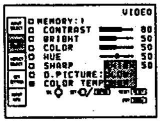
Emphasizes the dark portion of the picture.


VIDEO
MEMORY:1
CONTRAST 80
BRIGHT 50
COLOR 50
HUE 50
SHARP 50
D.PICTURE
COLOR TEMP

ON: Emphasizes the dark portion of the picture to produce a bolder "dynamic" picture.
OFF: Reproduces the dark portions of the picture accurately, in accordance with the source signal.

COLOR TEMP

Adjust the color temperature.


VIDEO
MEMORY:1
CONTRAST 80
BRIGHT 50
COLOR 50
HUE 50
SHARP 50
D.PICTURE:
COLOR TEMP

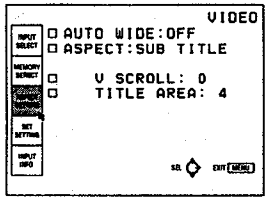
HIGH: Makes the white color bluish.
LOW: Makes the white color reddish.
HBM (high brightness mode): Reproduces a picture with high brightness.

The following items cannot be adjusted depending on the types of input signal

Item	Cannot be adjusted with
COLOR	black-and-white signal
HUE	Input signal other than NTSC 3.58/4.43 and HDTV signals

The ASPECT SELECT Menu

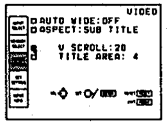
The ASPECT SELECT menu is used to set the picture mode.


VIDEO
☐ AUTO WIDE:OFF
☐ ASPECT:SUB TITLE
☐ V SCROLL: 0
☐ TITLE AREA: 4

Operation

When changing the adjustment level:

1. Select an item.
Use the ♦ or the ♦ key on the control panel to select the item, then press the ♦ or the ENTER key.
On the Remote Commander, move the joy stick up or down to select the item, then move it to the right or press the ENTER key.
The selected item is dislayed at the bottom.

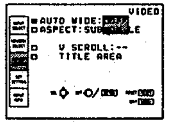

VIDEO
AUTO WIDE:OFF
ASPECT:SUB TITLE
V SCROLL:20
TITLE AREA: 4

2. Change the adjustment level.
To increase the number, press the ♦ or the ♦ key.
On the Remote Commander, move the joy stick up or to the right.
To decrease the number, press the ♦ or the ♦ key.
On the Remote Commander, move the joy stick down or to the left.

3. Press the ENTER key to restore the original screen.
The original screen is restored.

When changing the setting:

1. Select an item.
Use the ♦ or the ♦ key on the control panel to select the item, then press the ♦ or the ENTER key.
On the Remote Commander, move the joy stick up or down to select the item, then move it to the right or press the ENTER key.
The pop-up menu for the selected item appears.

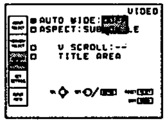

VIDEO
AUTO WIDE:
ASPECT:SU
V SCROLL:--
TITLE AREA

2. Change the setting.
Press the ♦ or the ♦ key on the control panel.
On the Remote Commander, move the joy stick up or down.

3. Press the ENTER or the ♦ key on the control panel to restore the original screen.
On the Remote Commander, press the ENTER key or move the joy stick to the left.

AUTO WIDE

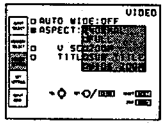
Selects the AUTO WIDE mode.


VIDEO
AUTO WIDE:
ASPECT:SU
V SCROLL:--
TITLE AREA

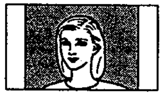
ON: The picture is automatically set to wide mode (ZOOM or SUB TITLE) when the letter box signal is received.
When the ID/1 signal is received, the picture is automatically set to FULL or ZOOM.
OFF: The AUTO WIDE function does not work.

ASPECT

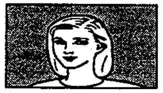
Sets the aspect ratio.


VIDEO
AUTO WIDE:OFF
ASPECT:
V S
TITL
NORMAL
FULL
ZOOM
SUB TITLE
WIDE ZOOM

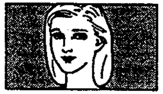
NORMAL: The picture with normal ratio 4:3 is displayed.



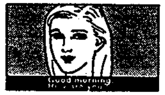
FULL: The picture with normal ratio 4:3 is enlarged horizontally.



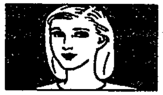
ZOOM: The picture with normal ratio 4:3 is enlarged vertically and horizontally (with same ratio) to the screen size



SUB TITLE: The subtitle area is compressed.

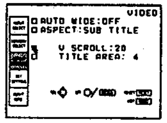

Good morning

WIDE ZOOM: The picture with normal ratio 4:3 is enlarged and the upper and lower portions of the picture are compressed.



V SCROLL

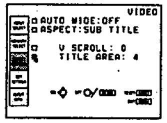
Adjusts the vertical position of the picture.


VIDEO
AUTO WIDE:OFF
ASPECT:SUB TITLE
V SCROLL:20
TITLE AREA: 4

Adjustable range is –31 to +31.
As the setting increases, the picture moves up, and as the setting decreases, the picture moves down.
To resume the normal position, press the RESET button.

TITLE AREA

Adjust the subtitle area.


VIDEO
AUTO WIDE:OFF
ASPECT:SUB TITLE
V SCROLL: 0
TITLE AREA: 4

Adjustable range is 0 to +8.
As the setting increases, the subtitle area becomes wide, and as the setting decreases, the subtitle area becomes narrow.
To resume the normal area, press the RESET button.

The following item cannot be adjusted depending on the types of input signal or the selected aspect ratio

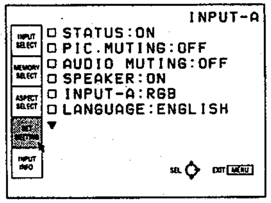
Item	Cannot be adjusted with
ASPECT SELECT menu	HDTV signal input from INPUT-A connectors
AUTO WIDE	RGB/Component signal input from INPUT-A connectors*
V SCROLL	NORMAL, FULL and WIDE ZOOM
TITLE AREA	NORMAL, FULL, ZOOM and WIDE ZOOM

* AUTO WIDE cannot be set to ON. However, the ASPECT can be adjusted manually.

The SET SETTING Menu

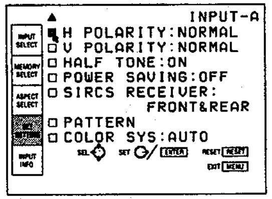
The SET SETTING menu is used for changing the settings of the projector.

<page 1>



INPUT-A
☐ STATUS:ON
☐ PIC.MUTING:OFF
☐ AUDIO MUTING:OFF
☐ SPEAKER:ON
☐ INPUT-A:RGB
☐ LANGUAGE:ENGLISH

<page 2>

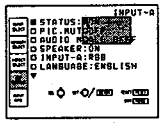


INPUT-A
☐ H POLARITY:NORMAL
☐ V POLARITY:NORMAL
☐ HALF TONE:ON
☐ POWER SAVING:OFF
☐ SIRCS RECEIVER:
FRONT&REAR
☐ PATTERN
☐ COLOR SYS:AUTO

The SET SETTING menu consists of two pages.
To change the page, press the ▼ or ▲ the key until the page changes when selecting an item.
On the Remote Commander, move the joy stick up or down until the page changes when selecting an item.

Operation

1. Select an item.
Use the ▲ or the ▼ key on the control panel to select the item, then press the ▶ or the ENTER key.
On the Remote Commander, move the joy stick up or down to select the item, then move it to the right or press the ENTER key.
The pop-up menu for the selected item appears.

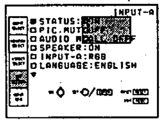


2. Change the setting.
Press the ▲ or the ▼ key to change the setting.
On the Remote Commander, move the joy stick up or down to change the setting.

3. Press the ENTER or the ◀ key to restore the original screen.

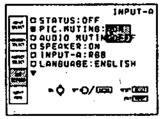
STATUS (on-screen display)

ON: Shows all of the on-screen displays.
OFF: Turns off the on-screen displays except for "NO INPUT", "PIC/AUDIO MUTING", and warning messages.
ALL OFF: Turns off all of the on-screen displays except for warning messages.



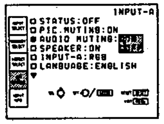
PIC. MUTING

Set to ON to cut off the picture.
When set to ON, "PIC MUTING" appears on the screen.



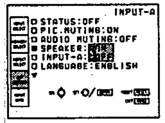
AUDIO MUTING

Set to ON to cut off the sound.
When set to ON, "AUDIO MUTING" appears on the screen.



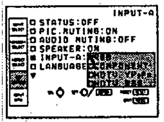
SPEAKER

Set to OFF to cut off the sound of the internal speakers. When set to OFF, "SPEAKER OFF" appears on the screen when you turn on the power.



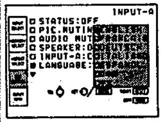
INPUT-A

Selects the RGB, COMPONENT, HDTV[1] YPBPR or HDTV RGB signal input from INPUT-A.



LANGUAGE

Selects the language used in the menu and on screen displays.



Available languages are: English, French, German, Italian, Spanish, Japanese and Chinese.

(continued)

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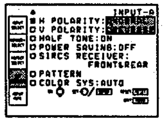
[1] HDTV: 1125/60 video signal

The SET SETTING Menu

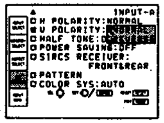
H (Horizontal) POLARITY

Set to REVERSE to reverse the horizontal orientation of the picture.



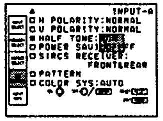
V (vertical) POLARITY

Set to REVERSE to reverse the vertical orientation of the picture.



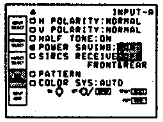
HALF TONE

Set to ON to reduce the luminance of the menu background.



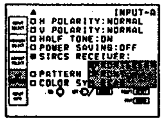
POWER SAVING

When set to "ON", the projector goes into the power saving mode if no signal is input for 10 minutes. The power saving mode is canceled when a signal is input or whenever a key is pressed.



SIRCS RECEIVER

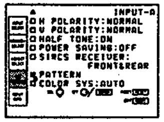
Selects the remote control detectors on the front and rear of the projector.



FRONT & REAR: Activates both the front and rear detectors.
FRONT: Activates the front detector only.
REAR: Activates the rear detector only.

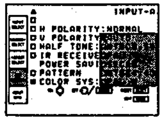
PATTERN

Press the ➡ or the ENTER key to display the "H" test pattern. Press the ⬅ or the ENTER key to clear the pattern. The pattern disappears automatically if no key is pressed for one minute.



COLOR SYS (system)

Selects the color system of the input signal.



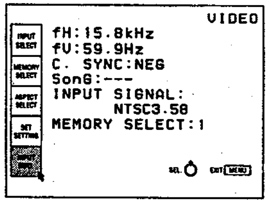
Normally, set to AUTO.
If the picture is distorted or colorless, select the color system according to the input signal.

The following item cannot be adjusted depending on the types of input signal

Item	Cannot be adjusted with
INPUT-A	Signal input from VIDEO IN connectors
COLOR SYS	Signal input from INPUT-A connectors

The INPUT INFO Menu

The INPUT INFO menu displays the information on a current input signal.



VIDEO
fH:15.8kHz
fV:59.9Hz
C. SYNC:NEG
SonG:---
INPUT SIGNAL:
NTSC3.58
MEMORY SELECT:1

fH (Horizontal frequency)

Indicates the horizontal frequency of the input signal. This indication is only used as a reference, this is not absolute value.

fV (Vertical frequency)

Indicates the vertical frequency of the input signal. This indication is only used as a reference, this is not absolute value.

Note
If the setting for INPUT-A on the SET SETTING menu is incorrect, or connection is not made properly, the horizontal and vertical frequencies will be indicated as "--.-".

C. SYNC (Composite Sync)

Indicates the polarity of the composite sync. signal. When the picture is being projected using its sync signal, POS (NEG) is displayed in green. When the picture is being projected without using sync signal, POS (NEG) is displayed in white.
POS: The polarity of the sync. signal is positive.
NEG: The polarity of the sync. signal is negative.
---: No sync. signal is input.

SonG

Indicates the polarity of the Sync on Green. When the picture is being projected using its sync signal, NEG is displayed in green. When the picture is being projected without using sync signal, NEG is displayed in white.
NEG: The polarity of the sync. signal is negative.
---: No Sync. signal is input.

INPUT SIGNAL

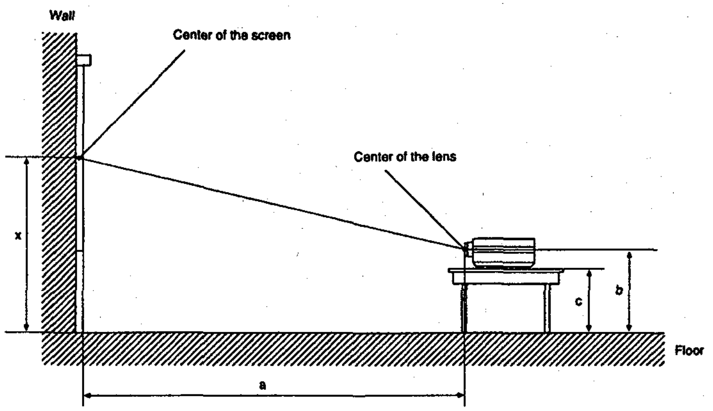
Displays the type of current input signal.
NTSC 3.58: NTSC 3.58 input signal from VIDEO IN
NTSC 3.58 Y/C: NTSC 3.58 Y/C input signal from VIDEO IN
NTSC 4.43: NTSC 4.43 input signal from VIDEO IN
NTSC 4.43 Y/C: NTSC 4.43 Y/C input signal from VIDEO IN
PAL: PAL input signal from VIDEO IN
PAL Y/C: PAL Y/C input signal from VIDEO IN
PAL-M: PAL-M input signal form VIDEO IN
PAL-M Y/C: PAL-M Y/C input signal form VIDEO IN
SECAM: SECAM input signal from VIDEO IN
SECAM Y/C: SECAM Y/C input signal from VIDEO IN
RGB: RGB input signal
COMPONENT: Component input signal
HDTV YPBPR: HDTV YPBPR input signal
HDTV RGB: HDTV RGB input signal
B/W 50: Black and white input signal from VIDEO IN (vertical frequency: 50 Hz)
B/W 60: Black and white input signal from VIDEO IN (vertical frequency: 60 Hz)

MEMORY SELECT

The MEMORY SELECT number is displayed

Installation Examples

Floor Installation



a: distance between the screen and the center of the lens
b: distance from the floor to the center of the lens
c: distance from the floor to the foot of the projector
x: free

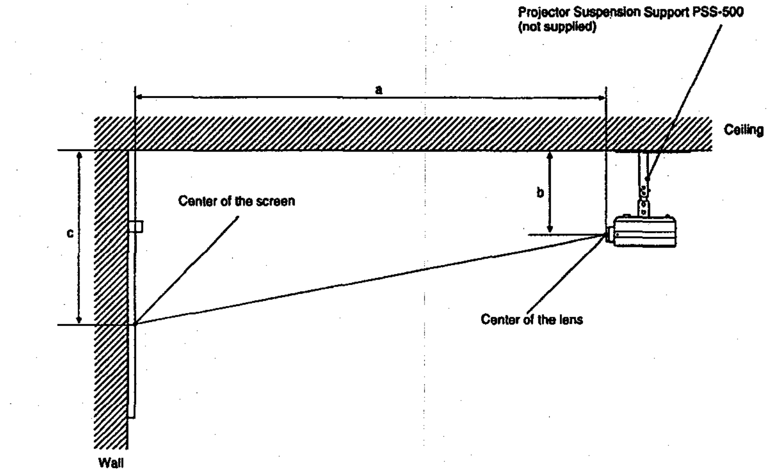
Unit: mm (inches)

16:9 screen size (inches)		41	60	80	100	120	150	180	200	250	300
a (mm)	Minimum	1490 (58 3/4)	2220 (87 1/2)	3000 (118 1/8)	3770 (148 1/2)	4540 (178 7/8)	5700 (224 1/2)	6860 (270 1/8)	7640 (301 1/8)	9570 (376 7/8)	11500 (452 7/8)
	Maximum	2280 (83 7/8)	3400 (133 7/8)	4570 (180)	5740 (226 1/8)	6910 (272 1/8)	8660 (341)	10420 (407)	11590 (456 3/4)	14520 (571 3/4)	17450 (687 1/8)
b (mm)		x–334 (13 1/4)	x–488 (19 1/4)	x–651 (25 3/4)	x–814 (32 1/8)	x–977 (38 1/2)	x–1221 (48 1/8)	x-1465 (57 3/4)	x–1628 (64 1/8)	x–2035 (80 3/16)	x–2442 (96 1/4)
c (mm)		x–445 (17 5/8)	x–599 (23 5/8)	x–762 (30 1/8)	x–925 (36 1/2)	x–1088 (42 7/8)	x–1332 (52 1/2)	x-1576 (62 1/8)	x–1739 (68 1/2)	x–2146 (84 9/16)	x–2553 (100 5/8)

4:3 screen size (inches)		34	60	80	100	120	150	180	200	245
a (mm)	Minimum	1510 (59 1/2)	2740 (108)	3690 (145 3/8)	4630 (182 1/2)	5580 (219 3/4)	7000 (275 5/8)	8420 (331 5/8)	9370 (369)	11500 (452 7/8)
	Maximum	2320 (91 3/8)	4180 (164 5/8)	5620 (221 3/8)	7050 (277 5/8)	8480 (334)	10630 (418 1/4)	12780 (503 1/4)	14210 (559 5/8)	17440 (686 3/4)
b (mm)		x–339 (13 3/8)	x–598 (23 5/8)	x–797 (31 1/2)	x–996 (39 1/4)	x–1196 (47 1/8)	x–1494 (58 7/8)	x-1793 (425)	x–1993 (78 1/2)	x–2441 (96 1/8)
c (mm)		x–450 (17 3/4)	x–709 (28)	x–908 (35 7/8)	x–1107 (43 5/8)	x–1307 (51 1/2)	x–1605 (63 1/4)	x-1904 (75)	x–2104 (82 7/8)	x–2552 (100 1/2)

Ceiling Installation

For ceiling installation, consult with qualified Sony personnel.



a: Distance between the screen and the center of lens
b: Distance between the ceiling and the center of the lens
c: Distance between the ceiling and the center of the screen

Unit: mm (inches)

16:9 screen size (inches)		41	60	80	100	120	150	180	200	250	300
a (mm)	Minimum	1490 (58 3/4)	2220 (87 1/2)	3000 (118 1/8)	3770 (148 1/2)	4540 (178 7/8)	5700 (224 1/2)	6860 (270 1/8)	7640 (301 1/8)	9570 (376 7/8)	11500 (452 7/8)
	Maximum	2280 (83 7/8)	3400 (133 7/8)	4570 (180)	5740 (226 1/8)	6910 (272 1/8)	8660 (341)	10420 (410 1/8)	11590 (456 3/4)	14520 (571 3/4)	17450 (687 1/8)
b (mm)		247/272/297/347/372/397 (9 5/8)/(10 3/4)/(11 3/4)/(13 3/4)/(14 3/4)/(15 3/4)									
c (mm)		b+334 (13 1/4)	b+488 (19 1/4)	b+651 (25 3/4)	b+814 (32 1/8)	b+977 (38 1/2)	b+1221 (48 1/8)	b+1465 (57 5/8)	b+1628 (64 1/8)	b+2035 (80 3/16)	b+2442 (96 1/4)

4:3 screen size (inches)		34	40	60	80	100	120	150	180	200	245
a (mm)	Minimum	1510 (59 1/2)	1790 (70 1/4)	2740 (108)	3690 (145 3/8)	4630 (182 1/2)	5580 (219 3/4)	7000 (275 5/8)	8420 (331 5/8)	9370 (369)	11500 (452 7/8)
	Maximum	2320 (91 3/8)	2750 (108 3/8)	4180 (164 5/8)	5620 (221 3/8)	7050 (277 5/8)	8480 (334)	10630 (418 1/4)	12780 (503 1/4)	14210 (559 5/8)	17440 (686 3/4)
b (mm)		247/272/297/347/372/397 (9 5/8)/(10 3/4)/(11 3/4)/(13 3/4)/(14 3/4)/(15 3/4)									
c (mm)		b+339 (13 3/8)	b+399 (15 3/4)	b+598 (23 5/8)	b+797 (31 1/2)	b+996 (39 1/4)	b+1196 (47 1/8)	b+1494 (58 7/8)	b+1793 (70 5/8)	b+1993 (78 1/2)	b+2441 (96 1/8)

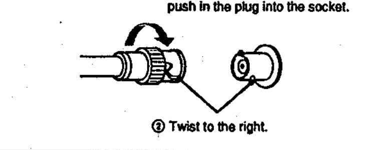
Connection Example

For details on how to conncet a VCR or external active speakers, see page 14. Also refer to the instruction manual of the equipment to be connected.

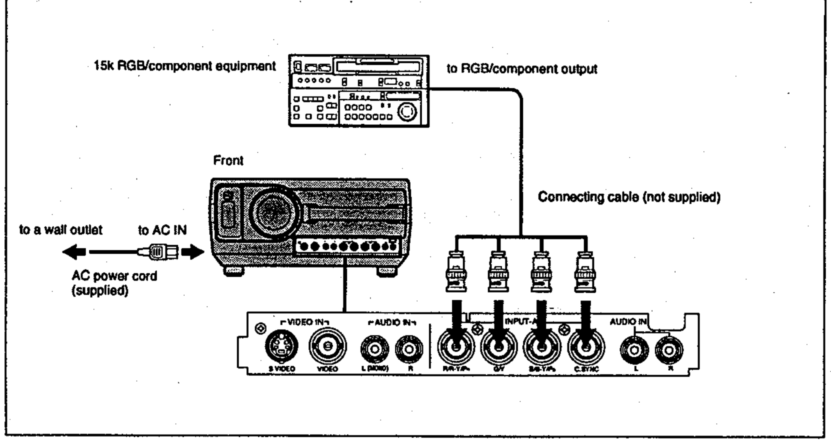
When making connections, be sure to:

- Before connecting any cables, make sure that each piece of equipment to be connected is turned off.
- Use cables appropriate for the equipment to be connected.
- A loose connection may cause hum or noise.
- When disconnecting a cable, pull it out from the plug; not the cable itself.

Connecting a BNC connector:


① Align the pins with the pin holes and push in the plug into the socket.
② Twist to the right.

Connecting 15k RGB/Component Equipment


15k RGB/component equipment
to RGB/component output
Front
Connecting cable (not supplied)
to a wall outlet
to AC IN
AC power cord (supplied)
VIDEO IN
AUDIO IN
S VIDEO
VIDEO
L (MONO)
R
INPUT-A
R/R-Y/PR
G/Y
B/B-Y/PB
C.SYNC
AUDIO IN
L
R

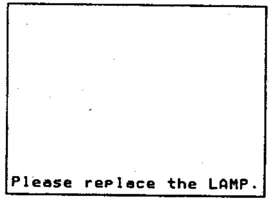
Notes

- This unit cannot accept separate sync signal with 15k RGB/component input signal. Use composite sync (negative) or Sync on Green.
- Select the RGB, COMPONENT, HDTV signal with the INPUT-A item on the SET SETTING menu.

Maintenance

Changing the Lamp

When it is time to change the lamp, the message "Please replace the LAMP" appears on the screen when you turn on the projector. Once the message appears, replace the lamp promptly with a new PK-PJ500 lamp.

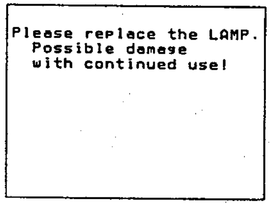


```
Please replace the LAMP.
```

The message disappears if any key on the control panel or the Remote Commander is pressd.

Notes

- If you continue to use the projector after the message above has appeared, the following message appears.



```
Please replace the LAMP.
  Possible damage
  with continued use!
```

When this message appears, no key except the POWER key will be operable.

- After turning off the power, wait at least one hour before changing the lamp to give it time to cool down completely.

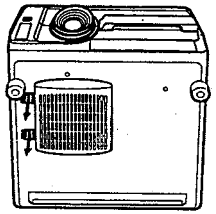
For details on replacement, refer to the Instruction Manual of the lamp.

Cleaning the Air Filter

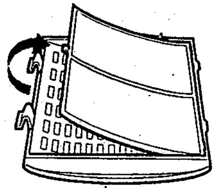
The air filter should be cleaned every 300 hours. When it becomes difficult to remove the dust from the filter, replace the filter with a new one.
To clean the air filter, follow the steps below:

1 Turn off the MAIN POWER switch and unplug the power cord.

2 Remove the air filter cover on the bottom of the projector.



3 Remove the air filter.



4 Remove the dust from the filter with a vacuum cleaner.

5 Attach the air filter and replace the cover.

Notes

- If the air filter is excessively dirty, wash it with a mild detergent solution and dry it in a shaded place.
- Be sure to attach the air filter cover firmly; the power will not be turned on if the cover is not closed securely.

Troubleshooting

If the projector appears to be operating erratically, try to diagnose and correct the problem, using the following guide. If the problem still persists, consult with qualified Sony personnel.

Symptom	Cause	Remedy
The power is not turned on.	The MAIN POWER switch is turned off.	Press the MAIN POWER switch at the rear of the projector (see page 15).
	The power has been turned off and on with the POWER key at a short internal.	Wait for about one minute before turning on the power with the POWER key.
	Lamp cover is detached.	Close the lamp cover securely (see page 33).
	Air filter cover is detached.	Close the air filter cover securely (see page 33).
No picture and no sound.	Cable is disconnected.	Check that the proper connections have been made (see pages 14 and 32).
	Input selection is incorrect.	Select the input source correctly.
No picture or no sound.	Either the picture or the sound is out off.	Press the MUTING keys to release the muting function (see page 16).
The picture is noisy.	Noise may appear on the background depending on the combination of the numbers of dot input from INPUT A and numbers of pixel on the LCD panel.	Change the desktop pattern on the connected computer.
Picture from INPUT A is distored.	Setting for INPUT-A on the SET SETTING menu is inccorect.	Select RGB, COMPONENT, HDTV YP_BP_R or HDTV RGB for INPUT A on the SET SETTING menu according to the input signal.
On-screen displays do not appear.	STATUS in the SET SETTING menu has been set to OFF or ALL OFF.	Set STATUS in the SET SETTING menu to ON (see page 26).
Color balance is incorrect.	Picture has not been adjusted properly.	Adjust the picture (see pages 22 and 23).
	Projector is set to wrong color system.	Set the color system in the SET SETTING menu to match the color system being input.
Picture is too dark.	Lamp is nearing the end of its life.	Change the lamp (see page 33).
	Contrast or brightness has not been adjusted properly.	Adjust the contrast or brightness properly.
Picture is not clear.	Picture is out of focus.	Adjust the focus (see page 16).
	Condensation has occurred on the lens.	Leave the projector for about two hours with the power on.
The LAMP indicator lights up.	A trouble has prevented the lamp from lighting.	Replace the lamp. If the projector is installed on the ceiling, consult with qualified personnel.
The LAMP indicator flashes.	The lamp cover or the air filter cover is detached.	Attach the cover securely (see page 33).
The TEMP indicator lights up.	The internal temperature is unusually high.	Check to see that nothing is blocking the ventilation holes and leave the projector for about one hour (see page 10).
The Remote Commander does not work.	The Remote Commander batteries are dead.	Replace with new batteries (see page 12).
	The MOUSE/MENU switch has been switched to the MOUSE position.	Set the switch to MENU position.
	You are using the Remote Commander as a wireless Remote Commander, and it is connected to the projector.	Disconnect the cable.
	The unit is influenced of the fluorescent lamp.	Change the setting of SIRCS RECEIVER in the SET SETTING menu.

(continued)

Notes
- When the LAMP indicator lights up, **never open the lamp cover if the projector is installed on the ceiling.**
- If the lamp looks damaged when replacing, consult with qualified Sony personnel.
- If the lamp does not light even after replacing it with a new one, consult with qualified Sony personnel.
- If the TEMP indicator starts flashing, consult with qualified Sony personnel.

On-screen messages

Use the list below to check the meaning of the messages displayed on the screen.

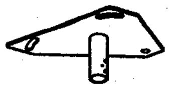
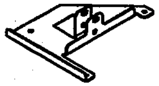
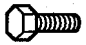
Message	Meaning	Remedy
NO INPUT	No input signal	Check connections
Not applicable!	You have pressed the wrong key.	Press the appropriate key.
OPERATING TEMPERATURE TOO HIGH! This set will be shut down after 5 minutes	Operating temperature is too high.	Turn off the power. Check to see that nothing is blocking the ventilation holes.
Please replace the LAMP.	The lamp has reached the end of its life.	Replace the lamp.

1-2. PSS-500

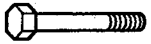
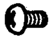
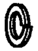
Maximum load: 15 kg (33 lb 1 oz)
The PSS-500 suspension support is designed for use with Sony LCD Data projectors the VPL-V500Q/QM.

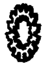
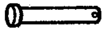
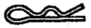
Caution
- For installation, consult with qualifies Sony personnel.
- The ceiling should be capable of supporting a weight of at least 80 kg (396 lb 13 oz); if not, the ceiling must be reinforced.
- When you attach the bracket directly to the ceiling, use commercially available M10 bolts with nuts and washers, depending on the ceiling. Use of other bolts, nuts, and washers other than M10 may present a danger of falling.
- Be sure to assemble and attach the bracket in the order indicated; otherwise the projector may fall.

Parts List

(a)	**Upper ceiling mount bracket (1)**	
(b)	**Adjustment pipe (1)**	
(c)	**Adjustment pipe (1)**	
(d)	**Projector mount bracket (1)**	
(e)	**Bolt M6 x 35 (3)**	

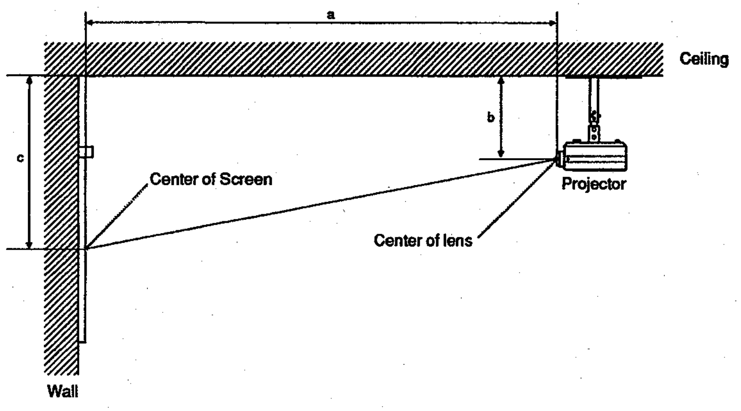
Parts List

(f)	**Bolt M8 x 50 (2)**	
(g)	**Screw M4 x 6 (3)**	
(h)	**Washer M6 (3)**	
(i)	**Washer M8 (4)**	
(j)	**Spring washer M6 (3)**	

(k)	**Toothed lock washer M8 (4)**	
(l)	**Nut M8 (2)**	
(m)	**6 mm pin (2)**	
(n)	**Snap pin (2)**	

Installation Diagram

Side view



a: Distance between the screen and the center of lens

b: Distance between the ceiling and the center of lens. For details, see page 11.

c: Distance between the ceiling and the center of screen

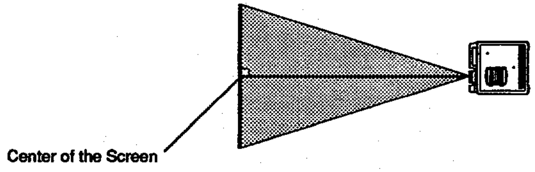
Units: mm (inches)

Screen size (inches)		80	100	120	150	180	200	250	300
a	Minimum	3090 (121 3/4)	3880 (152 7/8)	4680 (184 3/8)	5870 (231 1/8)	7070 (278 3/8)	7860 (309 1/2)	9860 (388 1/4)	11850 (466 5/8)
	Maximum	4710 (185 1/2)	5910 (232 3/4)	7120 (280 3/8)	8920 (351 1/4)	10730 (422 1/2)	11940 (470 1/8)	11950 (588 5/8)	17960 (707 1/8)
b		247/272/297/347/372/397 (9 3/4 / 10 4/3 / 11 3/4 / 13 3/4 / 14 3/4 / 15 3/4) adjustable							
c		b+677 (26 3/4)	b+846 (33 3/8)	b+1015 (40)	b+1269 (50)	b+1523 (60)	b+1692 (66 5/8)	b+2115 (83 3/8)	b+2583 (101 3/4)

Installation Diagram

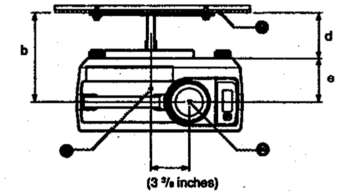
Top view

Align the center of the lens with the center of the screen.



Front view

The lens is offset 83.5 mm (3 3/8 inches) to the right from the center of projection balance. When mounting, take care to align the center of the lens with the center of the screen; not the center of projection balance.



① Ceiling

② Center of lens

③ Center of supporting bar

b: Distance between the ceiling and the center of lens

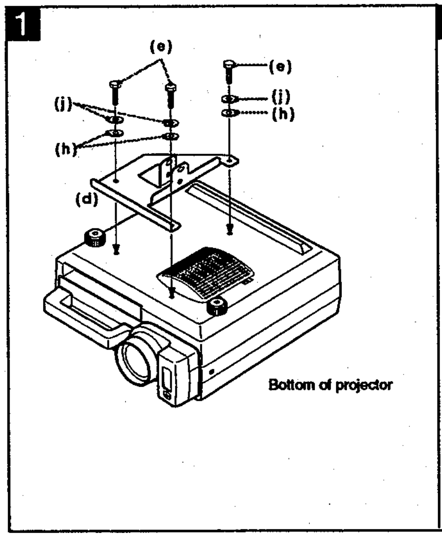
d: Distance between the ceiling and the surface of the mounting bracket*

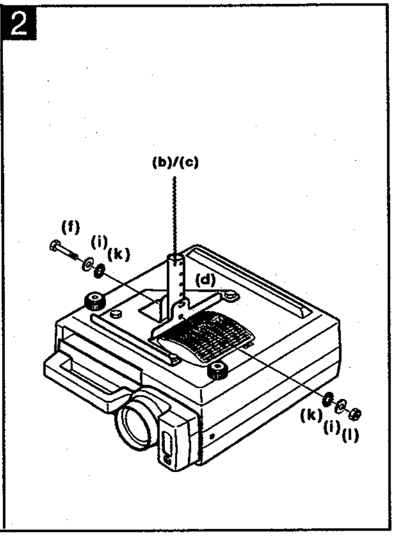
e: Distance between the bottom surface of the mounting bracket and the center of the lens: 97 mm (3 7/8 inches)

---

* Using adjusyment pipe (b) : 150/175/200 mm (6/7/ 7 7/8 inches)
Using adjusyment pipe (c) : 250/275/300 mm (9 7/8 /10 7/8 /11 7/8 inches)

Attaching to the ceiling





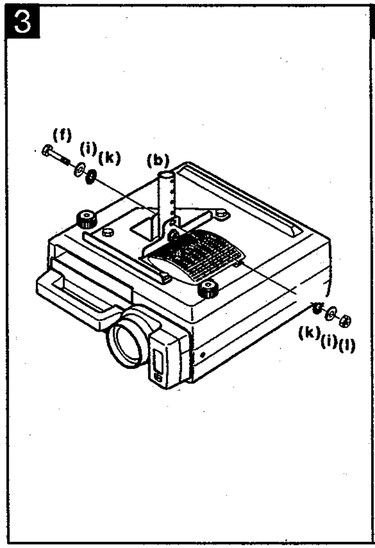
1 Turn the projector upside down and attach the projector mount bracket (d) using bolts M6 x 35 (e), washers M6 (h) and spring washers M6 (j).

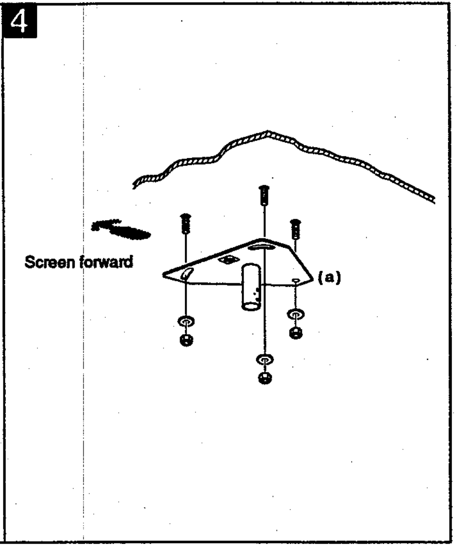
Note

When attaching the bracket, be careful not to overtighten the bolts.

2 Attach adjustment pipe (b) or (c) to projector mount bracket (d) using bolt M8 x 50 (f), washers M8 (i), thoothed lock washers M8 (k) and nuts M8 (l).
Adjustable height using the pipe (b) is 150/175/200 mm (6/7/7 $^{7}/_{8}$ inches).
Adjustable height using the pipe (c) is 250/275/300 mm (9 $^{7}/_{8}$ /10 $^{7}/_{8}$ /11 $^{7}/_{8}$ inches).

Attaching to the ceiling

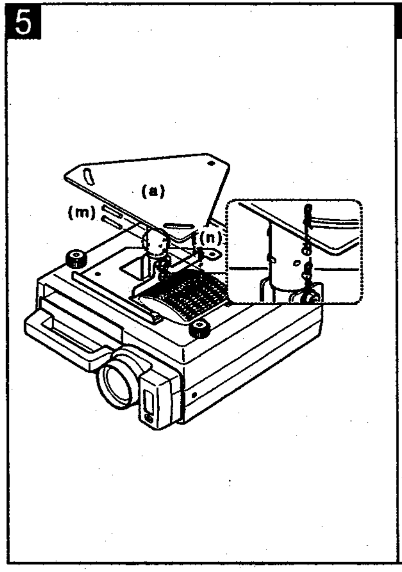


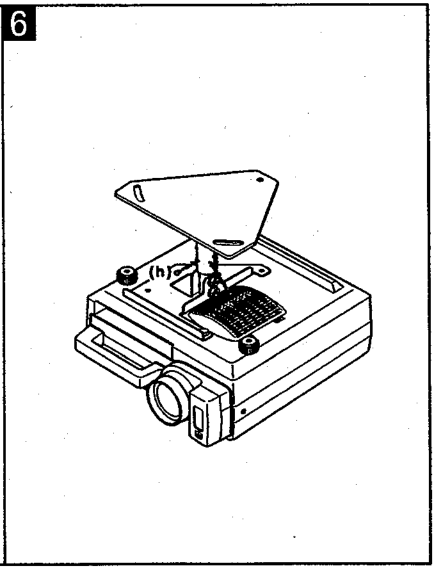


3 Attach the adjustment pipe to the projector mount bracket (d) using bolt M8 x 50 (f), toothed lock washers M8 (k), washers M8 (i) and nuts M8 (l).
Attach the pipes so that the projector becomes level.
You may tilt the projector slightly, but this will make the projected picture trapezoidal.

4 Attach the upper ceiling mount bracket (a) to the ceiling.
Use M 10 bolts, nuts and washers (not supplied).

Attaching to the ceiling





5 Insert the adjustment pipe into the upper ceiling mount bracket (a). Attach the pipe with the 6 mm pins (m) and the snap pins (n).
Pipe (b) can be adjusted to a height of 150/175/200 mm (6/7/7 $^{7}/_{8}$ inches); pipe (c) can be adjusted to a length of between 250/275/300 mm (9 $^{7}/_{8}$ /10 $^{7}/_{8}$ /11 $^{7}/_{8}$ inches).

6 Secure the ceiling mount bracket (a) and the adjustment pipe.
Use three M4 x 6 bolts (g).
Then, tighten the bolts you attached in step 3 to secure the adjustment pipe.

Installation Examples

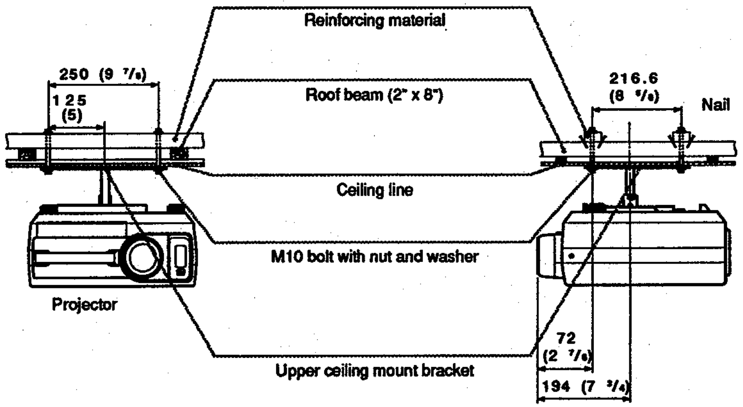
The following illustrations show the projector suspension support attached to with the ceiling. Installation is different depending on the material of ceiling.

Caution

Before installation, check that the maximum ceiling loading is in excess of 80 kg (396 lb 13oz) .

For wooden ceiling

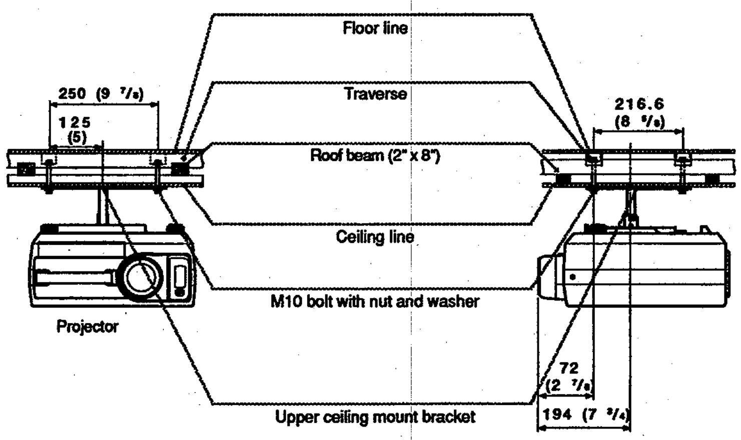
For-one-story house or uppermost floor


250 (9 7/8)
125
(5)
Reinforcing material
Roof beam (2" x 8")
216.6
(8 5/8)
Nail
Ceiling line
M10 bolt with nut and washer
Projector
72
(2 7/8)
Upper ceiling mount bracket
194 (7 3/4)

Units : mm (inches)

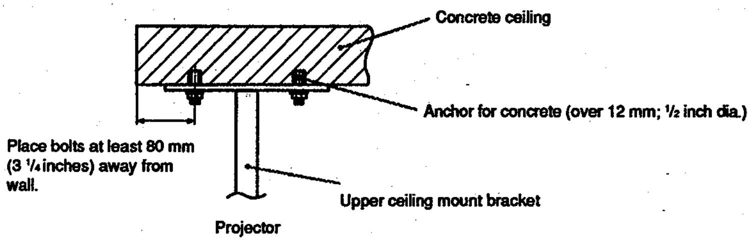
Installation Examples

For other floors

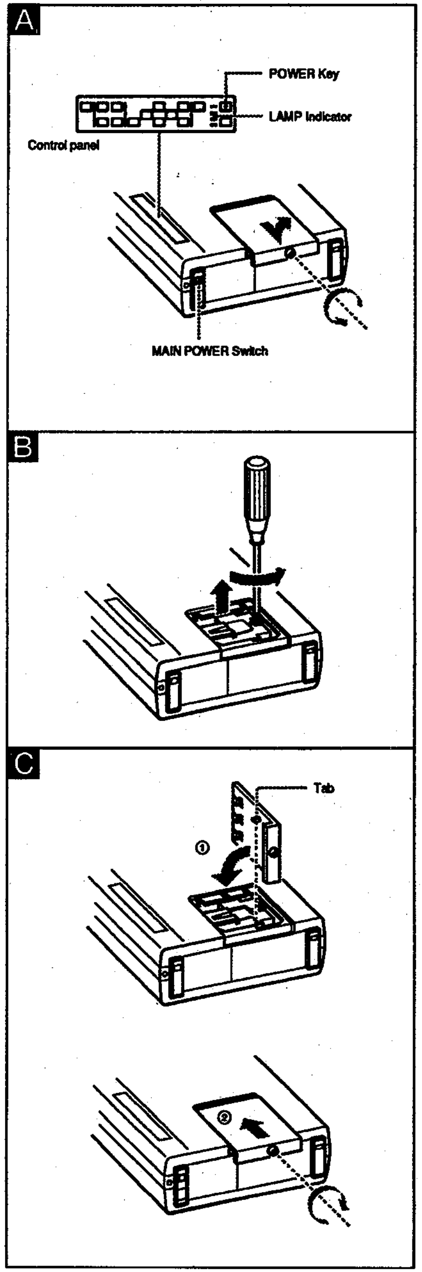

Floor line
250 (9 7/8)
Traverse
216.6
(8 5/8)
125
(5)
Roof beam (2" x 8")
Ceiling line
M10 bolt with nut and washer
Projector
72
(2 7/8)
Upper ceiling mount bracket
194 (7 3/4)

Units : mm (inches)

For concrete ceiling


Concrete ceiling
Anchor for concrete (over 12 mm; ½ inch dia.)
Place bolts at least 80 mm (3 ¼ inches) away from wall.
Upper ceiling mount bracket
Projector

1-3. PK-PJ500



Before operating the unit, please read this manual thoroughly and retain it for future reference.

The PK-PJ 500 lamp is designed to be used with the VPL-V500Q/QM LCD data projector only. Do not use it for any other projector as doing so may lead to breakdown or fire.

Before replacing the lamp

When the LAMP indicator lights up, never open the lamp cover if the projector is installed on the ceiling.

Replacing the lamp

1 When replacing the lamp immediately after using the projector, press the projector POWER key on the control panel or the remote commander. Wait for about 10 minutes. After the fan stops running, turn off the MAIN POWER switch. Wait for at least an hour for the lamp to cool.

Note

The lamp will still be very hot after turning off the MAIN POWER switch. Wait until the lamp has cooled completely before replacing.

2 Disconnect the power cord. After the lamp has cooled down completely, loosen the screw on the lamp cover (on the rear of the projector) using the supplied screw driver. Slide back the cover about 1 cm ($^{13}/_{32}$ inch), lift up and remove. (Figure A).

3 Loosen the screw on the lamp and pull the lamp out by the handle. (Figure B).

4 Insert the new lamp and push down securely. Tighten the screw.

Notes

- Be careful not to touch the lamp or the reflector.
- The power will not turn on if the lamp is not secured properly.

5 Close the lamp cover. (Figure C).

①Place the lamp cover, making sure that the tab on the back of the cover does not hit the cabinet.

②Slide the cover back, and tighten the screw.

Note

The POWER will not turn on if the lamp cover is not closed securely.

6 Connect the AC power cord and turn on the MAIN POWER switch. The projector will go into the standby mode.

7 Press the following control panel keys in the following order for less than in five seconds each:

LIGHT, ←, →, ENTER

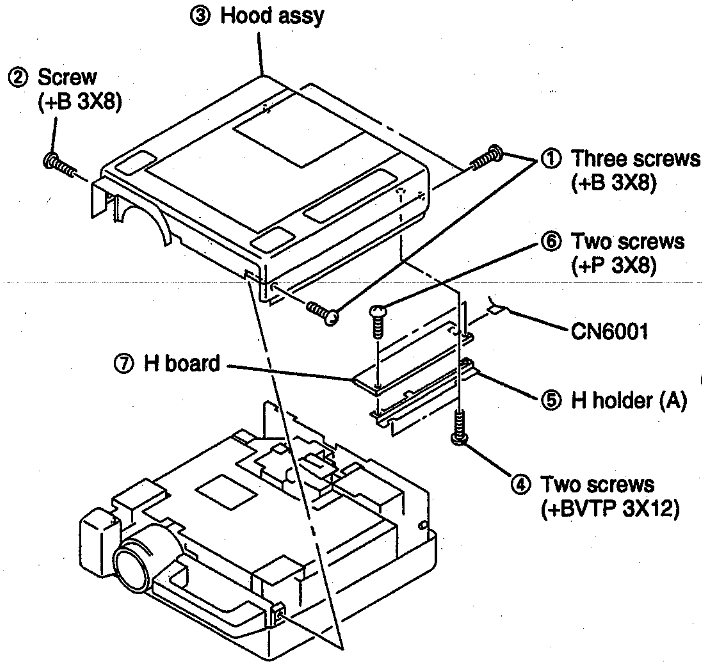
If the message "Please replase the LAMP." appears on the screen after pressing the POWER key on the control panel or remote commander, repeat Step 7 again.

Disposal of used projector lamp

As the materials used in this lamp are similar to those of a fluorescent lamp, you should dispose of a used projector lamp in the same way as a fluorescent lamp.

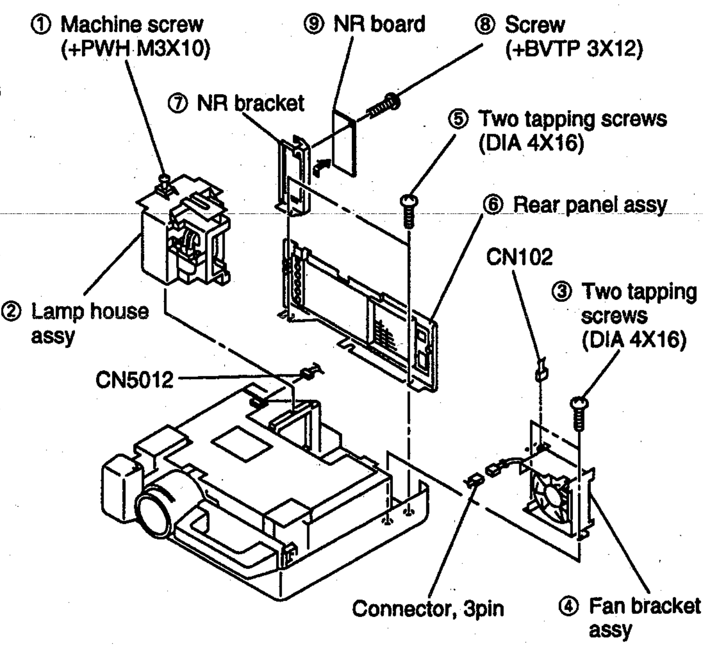
SECTION 2
DISASSEMBLY

2-1. HOOD ASSY AND H BOARD REMOVAL

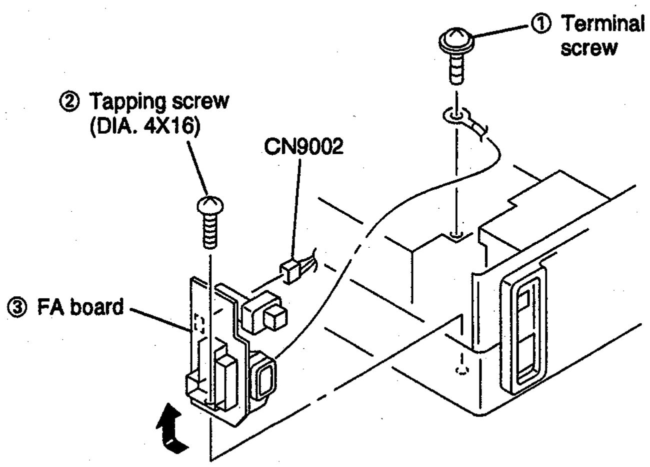

③ Hood assy
② Screw (+B 3X8)
① Three screws (+B 3X8)
⑥ Two screws (+P 3X8)
CN6001
⑦ H board
⑤ H holder (A)
④ Two screws (+BVTP 3X12)

2-3. NR BOARD REMOVAL

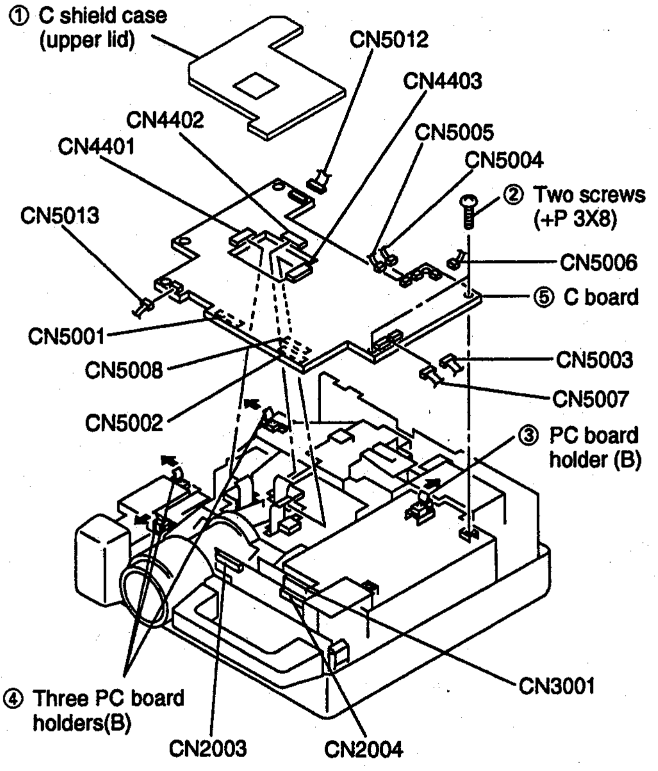
※ Remove the FA board.(Refer to 2-2)


① Machine screw (+PWH M3X10)
⑨ NR board
⑧ Screw (+BVTP 3X12)
⑦ NR bracket
⑤ Two tapping screws (DIA 4X16)
⑥ Rear panel assy
CN102
③ Two tapping screws (DIA 4X16)
② Lamp house assy
CN5012
Connector, 3pin
④ Fan bracket assy

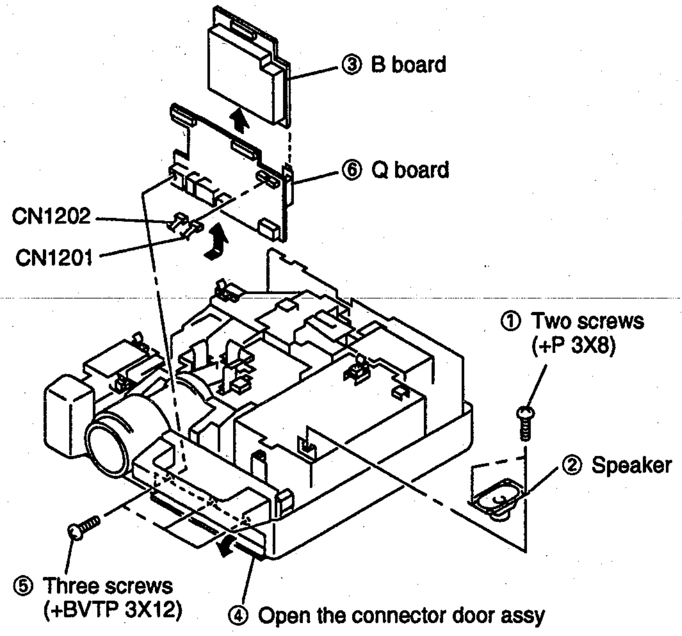
2-2. FA BOARD REMOVAL


① Terminal screw
② Tapping screw (DIA. 4X16)
CN9002
③ FA board

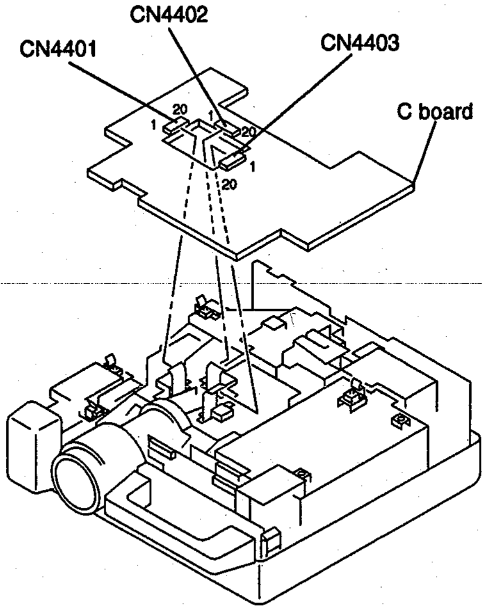
2-4. C BOARD REMOVAL


① C shield case (upper lid)
CN5012
CN4403
CN4402
CN4401
CN5005
CN5004
② Two screws (+P 3X8)
CN5013
CN5006
⑤ C board
CN5001
CN5008
CN5003
CN5007
CN5002
③ PC board holder (B)
④ Three PC board holders(B)
CN3001
CN2003
CN2004

2-5. B AND Q BOARDS REMOVAL

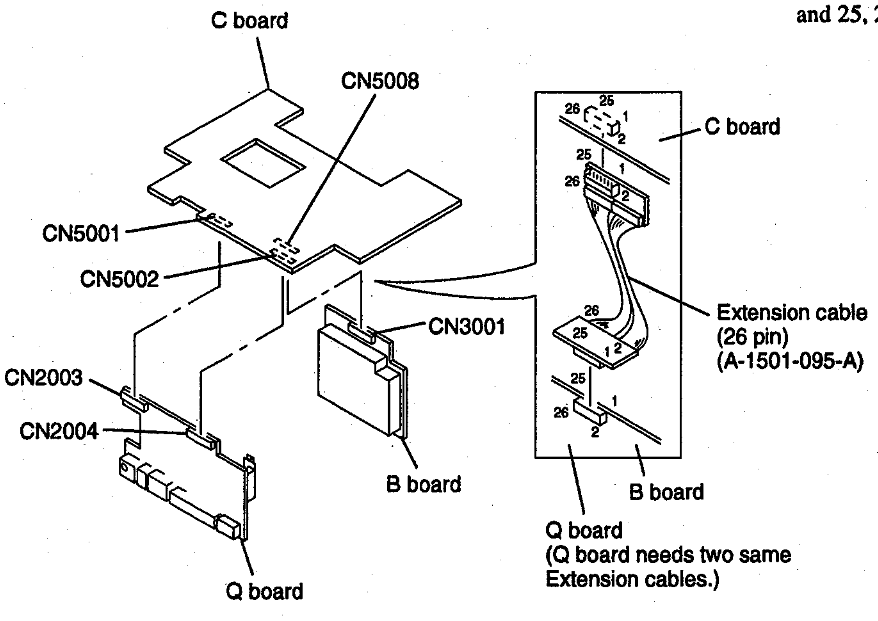

③ B board
⑥ Q board
CN1202
CN1201
① Two screws
(+P 3X8)
② Speaker
⑤ Three screws
(+BVTP 3X12)
④ Open the connector door assy

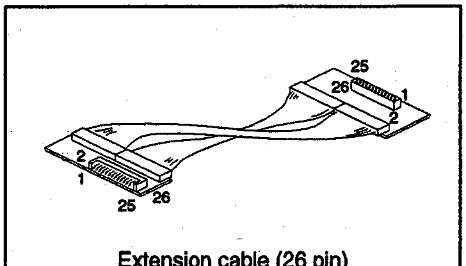
2-6-1. EXTENSION CABLE (1)


CN4402
CN4401
CN4403
C board
20
1
20
1
20
1
20

2-6-2. EXTENSION CABLE (2)

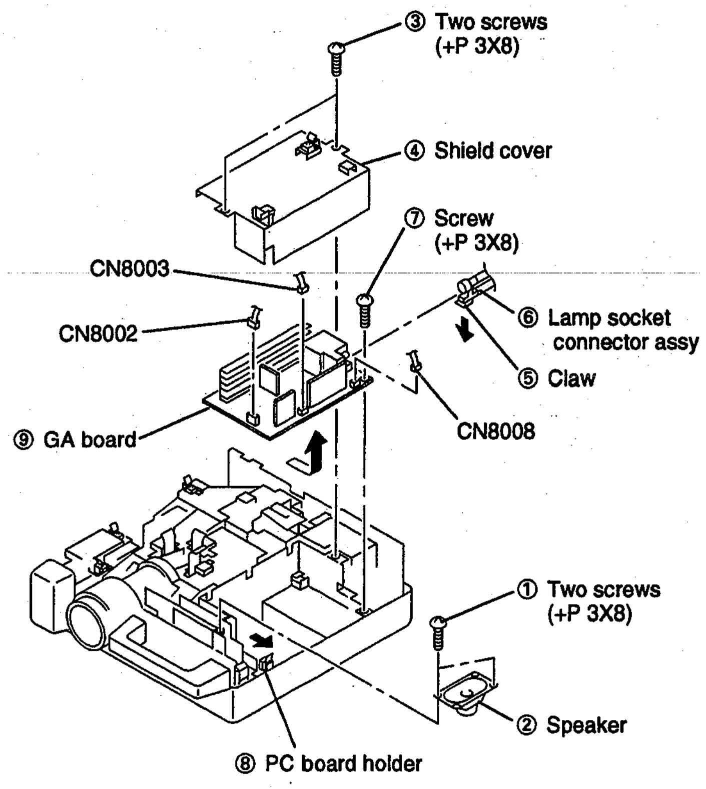
NOTE: Accord the extension cable's pin No (1, 2 sides and 25, 26 sides) with the other joint connector's pin No (1, 2 sides and 25, 26 sides).


C board
CN5008
CN5001
CN5002
CN2003
CN2004
CN3001
B board
Q board
26
25
1
2
C board
Extension cable
(26 pin)
(A-1501-095-A)
B board
Q board
(Q board needs two same Extension cables.)

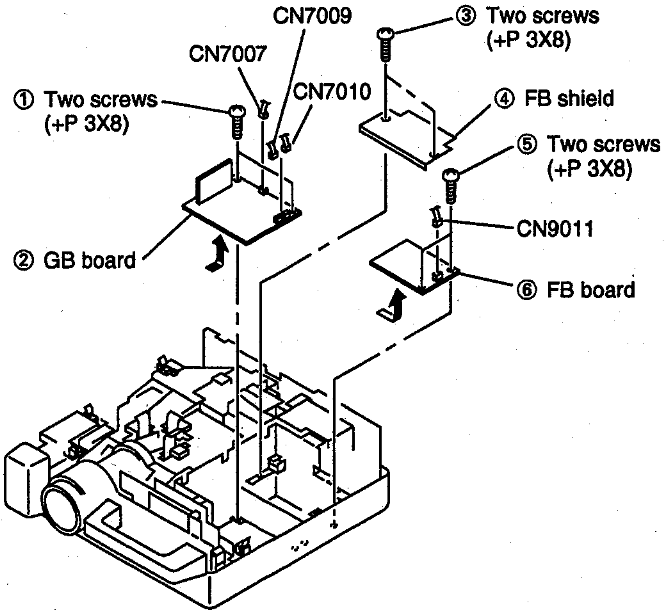

25
26
1
2
2
1
25
26

Extension cable (26 pin)
(A-1501-095-A)

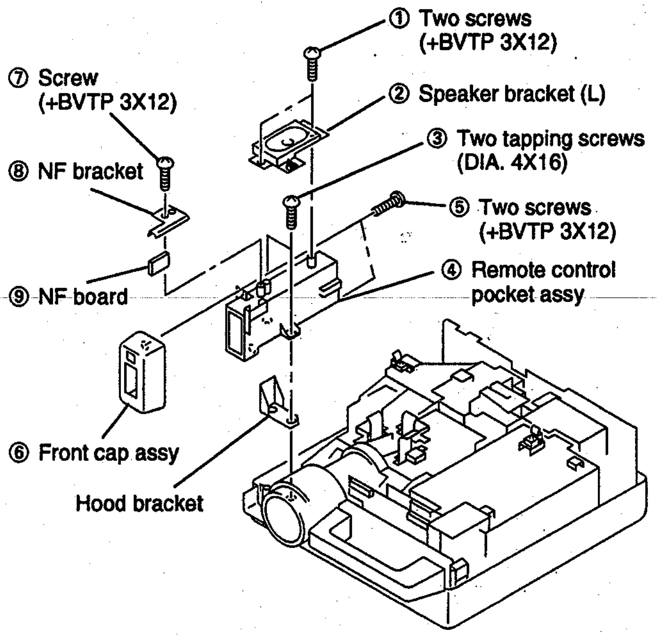
2-7. GA BOARD REMOVAL


③ Two screws (+P 3X8)
④ Shield cover
⑦ Screw (+P 3X8)
CN8003
CN8002
⑥ Lamp socket connector assy
⑤ Claw
CN8008
⑨ GA board
① Two screws (+P 3X8)
② Speaker
⑧ PC board holder

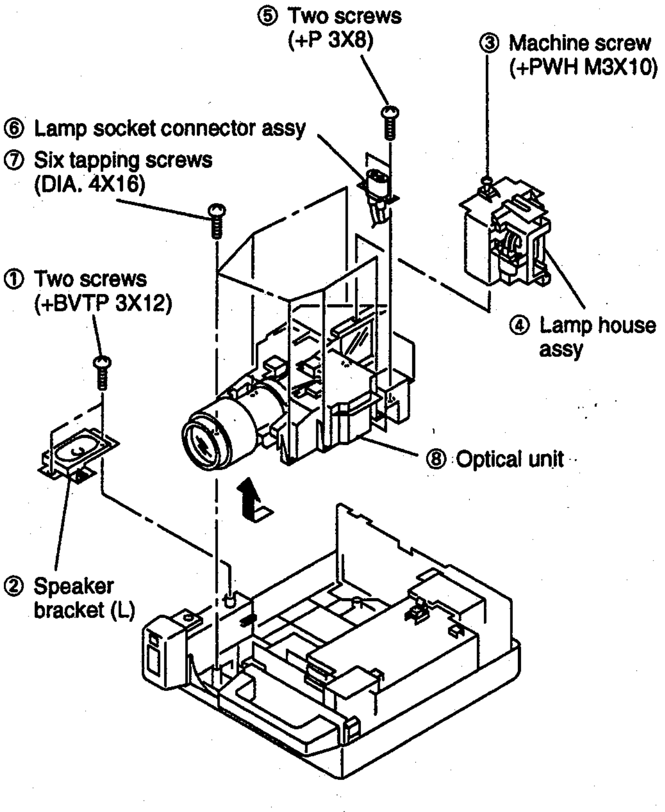
2-8. GB AND FB BOARDS REMOVAL


CN7009
CN7007
CN7010
③ Two screws (+P 3X8)
① Two screws (+P 3X8)
④ FB shield
⑤ Two screws (+P 3X8)
CN9011
② GB board
⑥ FB board

2-9. NF BOARD REMOVAL


① Two screws (+BVTP 3X12)
⑦ Screw (+BVTP 3X12)
② Speaker bracket (L)
③ Two tapping screws (DIA. 4X16)
⑧ NF bracket
⑤ Two screws (+BVTP 3X12)
④ Remote control pocket assy
⑨ NF board
⑥ Front cap assy
Hood bracket

2-10. OPTICAL UNIT REMOVAL


⑤ Two screws (+P 3X8)
③ Machine screw (+PWH M3X10)
⑥ Lamp socket connector assy
⑦ Six tapping screws (DIA. 4X16)
① Two screws (+BVTP 3X12)
④ Lamp house assy
⑧ Optical unit
② Speaker bracket (L)

SECTION 3
SET-UP ADJUSTMENTS

3-1. POLARIZING PLATE ADJUSTMENT

1. Input the all black signal.
2. Confirm the signal voltage which must be 10 Vp-p or more.
3. Confirm the Vcom voltage.
4. Loosen the screws securing the polarizing plate.
5. Adjust position of the polarizing plate until brightness becomes minimum. Make this adjustment for all channels of R, G and B. Tighten the screws securing the polarizing plate at the positions which give the minimum brightness.
   The illumination surrounding the VPL-W400Q screen must be sufficiently dark during this adjustment.

3-2. SET-UP ADJUSTMENT

1. V-COM Adjustment

1. Input the monoscope signal to VIDEO input.
   Make settings as follows:
   CONTRAST 80
   BRIGHT 50
2. Enter the service mode as shown below. Use the menu and enter the DEVICE ADJUSTMENT, then the SIGNAL ADJ.

   The procedure to enter the service mode.
   1) Use the menu and confirm that the STATUS ON is set.
   2) Let the menu disappear.
   3) Press the key in the following order:
      ENTER, ENTER, $\boxed{\uparrow}$ + $\boxed{\downarrow}$, ENTER
   4) The message <Do you wish to enter the SERVICE MODE?> appears.
   5) Select YES.
   6) Let the menu appear, and the letter "S" is displayed on the top in red.

3. Enter the flicker mode as follows.
   (Set 20 SLFR: to 1.)
4. Red V-COM Adjustment
   Use the light shading plates to cut off green and blue images, and obtain only the red image. Adjust the value of 17 R V-COM until the minimum flicker is obtained.

   However, if flicker does not decrease apparently, measure the waveforms of TP4521 <RED SIG2> and TP4519 <R V-COM> using an oscilloscope.
   Then adjust the 17 R V-COM so that the value of TP4519 <R V-COM> is -550 mV below the center of TP4521 <RED SIG2>.
   Then adjust the value of 17 R V-COM: within the range of ±10 of this value until the minimum flicker is obtained.
5. GREEN V-COM Adjustment
   Use the light shading plates to cut off red and blue images, and obtain only the green image.Adjust the value of 18 G V-COM until the minimum flicker is obtained.

   However,if flicker does not decrease apparently measure the waveforms of TP4515 <GREEN SIG2>and TP4513<G V-COM>using an oscilloscope.Then adjust the 18 G V-COM so that the value of TP4513 <G V-COM>is-500mV below the center of TP4515<GREEN SIG2>.
   Then adjust the value of 18 G V-COM:within the range of ±10 of this value until the minimun flicker is obtained.
6. BLUE V-COM Adjustment
   Use the light shading plates to cut off red and green images, and obtain only the blue image.Adjust the value of 19 B V-COM until the minimum flicker is obtained.

   However,if flicker does not decrease apparently measure the waveforms of TP4525 <BLUE SIG2>and TP4522<B V-COM>using an oscilloscope.Then adjust the 19 B V-COM so that the value of TP4522 <B V-COM>is-750mV below the center of TP4525<BLUE SIG2>.
   Then adjust the value of 19 B V-COM:within the range of ±10 of this value until the minimun flicker is obtained.

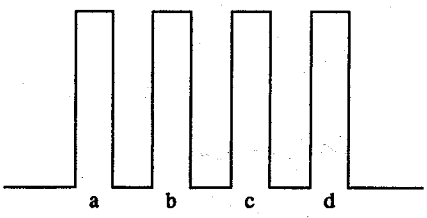
2. Signal Level Adjustment

INPUT A: Hi-vision color bar signal, Y Pb Pr
VIDEO: 75% color bar signal

Use the menu and enter the PICTURE ADJ.

1. Sub Hue and Sub Color Adjustment
   Adjust CXA1839 SUB HUE until the amplitude b = c is obtained at TP5012 as shown in the specification.
   Adjust CXA1839 SUB COLOR until the amplitude a = d is obtained at TP5012 as shown in the specification.
   Repeat the above described two adjustments of SUB HUE and SUB COLOR alternately until both specifications are satisfied at the same time. (Tracking adjustment)
   Perform this adjustment in NTSC, PAL, selecting forced NTSC3.58 or PAL 15K RGB and 15K Component respectively.

Specification for Sub Hue and Sub Color adjustment



TP5012: a - b ±10%

Perform this adjustment in Hi-vision too.

On 15K Component

Perform this adjustment using the following 100% color bar signal of the Betacam specification for USA/Canada and Japan models:
Y = 0.714 V from pedestal to 100 IRE
B-Y/R-Y = 0.933 Vp-p

Perform this adjustment using the following 100% color bar signal of the EBU specification for AEP (general European) model:
Y = 0.7 V from pedestal to 100 IRE
B-Y/R-Y = 0.7 Vp-p

Memorize the adjustment data into memory.

Copy the PAL adjustment data for SECAM and PAL-M selecting forced SECAM or PAL-M.

INPUT A: Hi-vision 10-step signal Y Pb Pr
Short TP4101 with TP4102.
Make settings as follows:
CONTRAST 80
BRIGHT 50

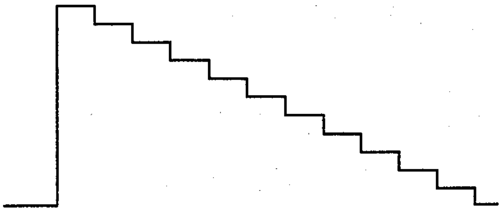
Use the menu and enter W/B ADJ.

2. INPUT A, RGB Level Adjustment

Enter the HBM mode.
Adjust R, G and B GAIN controls respectively until the signal amplitude at TP 5010, TP5011 and TP5012 satisfies the specifications as shown.
Enter the LOW, then HIGH modes.
Copy the adjustment data of HBM for LOW & HIGH.

R, G and B signal level specifications

At all of TP 5010, TP5011 and TP5012
0 IRE~100IRE : 0.70 ±0.02 Vp-p



3. White Balance (W/B) Adjustment

VIDEO: NTSC flat field
INPUT A: HDTV flat field Y Pb Pr

Use the menu and enter W/B ADJ.
<Conditions>

1. Allow pre-aging of 15 minutes or more.
2. Short TP4101 and TP4102 during this adjustment.

The VPL-W4000 has the six independent memories in total, for three modes of HBM, HIGH and LOW of the two inputs of HDTV and VIDEO respectively.

1. INPUT A W/B Adjustmen

Perform the VIDEO white balance adjustment in the FULL MODE.

*1. 100% brightness and chromaticity measurements
(Enter the HBM mode.)
Input the HDTV flat field signal having 100 IRE to INPUT A.
Change the setting of INPUT A of the VPL-W400 to HDTV YPbPr.
Set the CONTRAST and BRIGHT to MAX.
Use the light shading plates to cut off red and blue images,and obtain only the green image.
Measure brightness and chromaticity.

*2. HBM adjustment
(Enter the HBM mode.)
Input the HDTV flat field signal having 40 IRE to INPUT-A.
Adjust the G BIAS control until the Brightness specification is satisfied.
Input the HDTV flat field signal having 70 IRE to INPUT-A.
Adjust the G GAIN2 control until the Brightness specification is satisfied.
Repeat the above two adjustments of G BIAS and G GAIN2 alternately until the Brightness specifications are satisfied simultaneously.

Remove the light shading plates.
Input the HDTV flat field signal having 40 IRE to INPUT-A.
Adjust the R BIAS and B BIAS controls until the Chromaticity specification is satisfied.
Input the HDTV flat field signal having 70 IRE to INPUT-A.
Adjust the R GAIN2 and B GAIN2 controls until the Chromaticity specification is satisfied.
Repeat the above two adjustments of BIAS and GAIN2 alternately until the Chromaticity specifications are satisfied simultaneously.

HBM adjustment specifications
40 IRE
Brightness: (Measured value of item *1) × 0.115 ±6%
Chromaticity: Measured value of item *1 ±0.005
70 IRE
Brightness: (Measured value of item *1) × 0.418 ±6%
Chromaticity: Measured value of item *1 ±0.005

*3. LOW mode adjustment
(Enter the LOW mode.)
Input the HDTV flat field signal having 70 IRE to INPUT A.
Adjust the R GAIN and G GAIN controls until the following specification is satisfied.

Input the HDTV flat field signal having 30 IRE to INPUT A.
Adjust the R BIAS and G BIAS controls until the following specification is satisfied.
Repeat the above two adjustments of BIAS and GAIN controls alternately until the following specifications for 30 IRE and 70 IRE are satisfied simultaneously. (Tracking adjustment)
Memorize the adjustment values into the memory.

LOW mode adjustment specifications
Chromaticity around the center of screen: (0.312, 0.352) ±0.005

*4. HIGH mode adjustment
(Enter the HIGH mode.)
Input the HDTV flat field signal having 70 IRE to INPUT A.
Adjust the R GAIN and G GAIN controls until the following specification is satisfied.
Input the HDTV flat field signal having 30 IRE to INPUT A.
Adjust the R BIAS and G BIAS controls until the following specification is satisfied.
Repeat the above two adjustments of BIAS and GAIN controls alternately until the following specifications for 30 IRE and 70 IRE are satisfied simultaneously. (Tracking adjustment)
Memorize the adjustment values into the memory.

HIGH mode adjustment specifications
Chromaticity around the center of screen: (0.289, 0.318) ±0.005

2. VIDEO W/B Adjustment

Input the NTSC flat field signal having 100 IRE to VIDEO.
Copy the following adjustment values which are obtained by the INPUT A W/B Adjustment of previous item 1., in the HBM, LOW and HIGH modes respectively.
Memorize the adjustment values into memory.

HBM:
R GAIN, G GAIN, B GAIN, R BIAS, G BIAS, B BIAS, R GAIN2, G GAIN2, B GAIN2
LOW:
R GAIN, G GAIN, B GAIN, R BIAS, G BIAS, B BIAS
HIGH:
R GAIN, G GAIN, B GAIN, R BIAS, G BIAS, B BIAS

Memorize the adjustment data.

1. Selecct W/B adjust menu by pressing MENU & ← ↑ ↓ → key on control panel, and "save to memory" item.
2. Press enter or → key to find "saving is complete" on screen.

SECTION 4
CIRCUIT ADJUSTMENTS

4-1. C BOARD ADJUSTMENT

Note:

1. Perform all adjustments with the Dynamic Picture turned OFF.
2. Perform all adjustments with the Auto Contrast turned OFF except the item of Auto Contrast Check. (Turn OFF the Auto Contrast by shorting TP4101 and TP4102.)
3. Do not set 50H (80) or less to the bus data of MB88346 (IC4501 and IC4502).
   This is because the specified minimum voltage the CXA1853AQ control pin is 1.6 V.

1. PLL fo Adjustment

1. HD mode

1. Enter the HD mode.(Y PBPR)
   Y PBPR
   Input the HD signal.
2. Turn off (open) the H. sync input.
   Connect TP4406 with GND.
3. Connect the jig land that is pin② of IC4403, with GND (TP4404) via a 100 Ω resistor. Connect a frequency counter to pin① of IC4403.
4. Adjust L4403 for 14.85 ±0.1 MHz.
   Alternately, adjust L4403 until the picture stops on display while monitoring screen.
5. Input the H sync signal of HD TV.
   Disconnect TP4406 from GND.
6. Confirm that TP4401 PRD3 has the waveform as shown in Fig. 1.

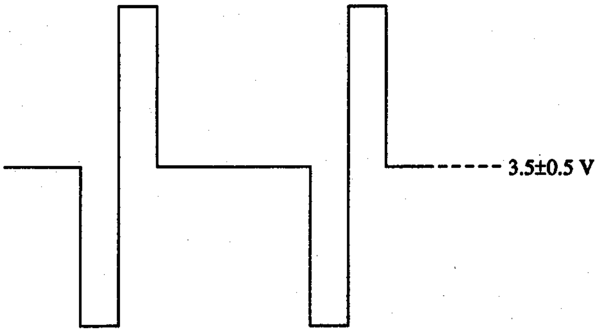


Fig. 1

2. VIDEO-WIDE mode

1. Enter the "VIDEO-FULL mode".
   Input the double speed NTSC signal.
2. Turn off (open) the H. sync input.
   Connect TP4406 with GND.
3. Connect the jig land that is pin② of IC4403, with GND (TP4404) via a 100 Ω resistor. Connect a frequency counter to pin① of IC4403.
4. Adjust L4402 for 13.80 ±0.1 MHz.
5. Input the H sync of the double speed NTSC signal.
   Disconnect TP4406 from GND.
6. Confirm that TP4402 PRD2 has the waveform as shown in Fig. 2.

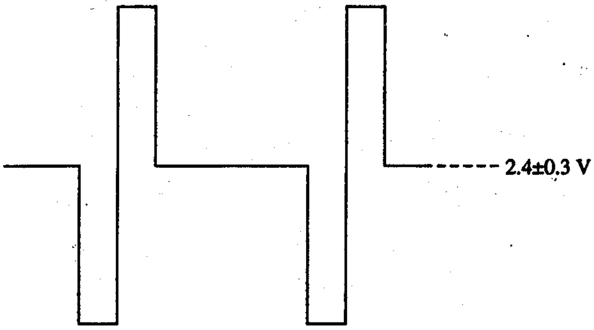


Fig. 2

3. VIDEO-NORMAL mode

1. Enter the "VIDEO-NORMAL mode".
   Input the double speed NTSC signal.
2. Turn off (open) the H. sync input.
   Connect TP4406 with GND.
3. Connect the jig land that is pin② of IC4403, with GND (TP4404) via a 100 Ω resistor. Connect a frequency counter to pin① of IC4403.
4. Adjust L4402 for 10.32 ±0.05 MHz.
5. Input the H sync of the double speed NTSC signal.
   Disconnect TP4406 from GND.
6. Confirm that TP5004 PRD1 has the waveform as shown in Fig. 3.

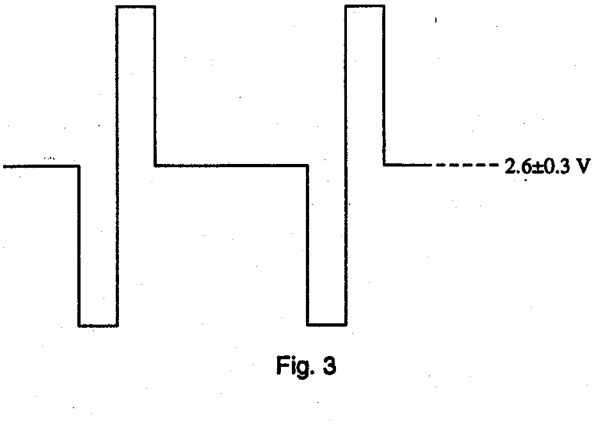


Fig. 3

2. V-COM Adjustment

Enter the service mode.

Use the menu and enter SIGNAL ADJ.

1. Enter the "HD mode". Input the 100 IRE flat field signal to VPL-W400.
2. Adjust the RVCOM value until the voltage of TP4519 (R-VCOM) becomes 0.55 V lower than the center point of TP4521 (R-SIG2) as shown.
3. In the same way as step 2, adjust the GVCOM value until the voltage of TP4513 (G-VCOM) becomes 0.5 V lower than the center point of TP4515 (G-SIG2).
4. In the same way as step 2, adjust the BVCOM value until the voltage of TP4522 (B-VCOM) becomes 0.75 V lower than the center point of TP4515 (B-SIG2).

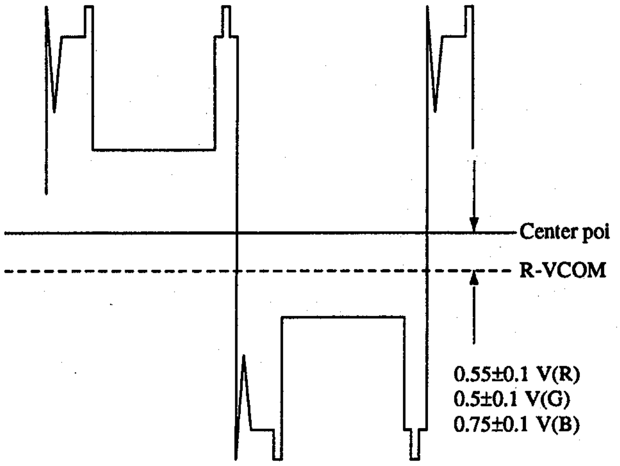


Fig. 4

3. GAIN Adjustment

Enter the service mode.

Use the menu and enter W/B ADJ.

1. Enter the "HD mode". Input the HD 10-step signal to VPL-W400.
   CONTRAST 80%
   Enter the "HIGH BRIGHT mode"

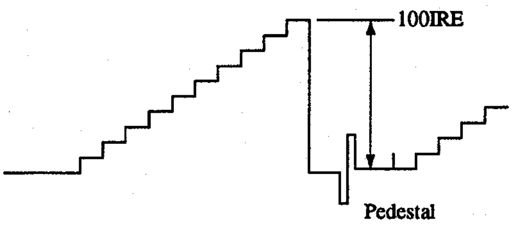


Fig. 5

2. Adjust the G. GAIN until the amplitude between the pedestal and 100 IRE level at TP5011 G2 satisfies the following specification.
   0.7 ±0.02 V
3. Input the G. GAIN value into B. GAIN and R. GAIN.
4. Enter the "LOW" mode.
5. Adjust the G. GAIN until the amplitude between the pedestal and 100 IRE level at TP5011 G2 satisfies the following specification.
   0.6 ±0.02 V
6. Enter the "HIGH" mode.
7. Adjust the G. GAIN until the amplitude between the pedestal and 100 IRE level at TP5011 G2 satisfies the following specification.
   0.55 ±0.02 V
8. Switch the mode to the "VIDEO mode".
9. Switch the mode to the "HIGH BRIGHT mode". Input the G. GAIN, B. GAIN and R. GAIN values which have been adjusted in the HD mode.
10. Switch the mode to the "LOW mode". Input the G. GAIN value which has been adjusted in the HD mode.
11. Switch the mode to the "HIGH mode". Input the G. GAIN value which has been adjusted in the HD mode.

4. Signal Level Adjustment

Enter the service mode.

Use the menu and enter SIGNAL ADJ.

1. Enter the "HD mode". Input the HD 10-step signal to VPL-W400.
2. Observe the signal of the horizontal period. Invert polarity of the waveform at TP4526 (R-SIG1), then add it to the waveform at TP4521 (R-SIG2).
3. Adjust R1 GAIN and R1 BIAS until the added waveform becomes flat.
   (Because the added waveform cannot become completely flat, make adjustment so that the signal portion between 20 IRE and 80 IRE becomes as flat as possible as shown.

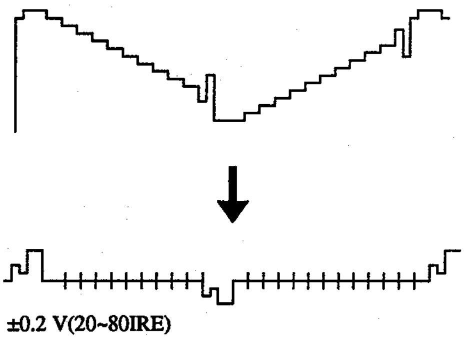


Fig. 6

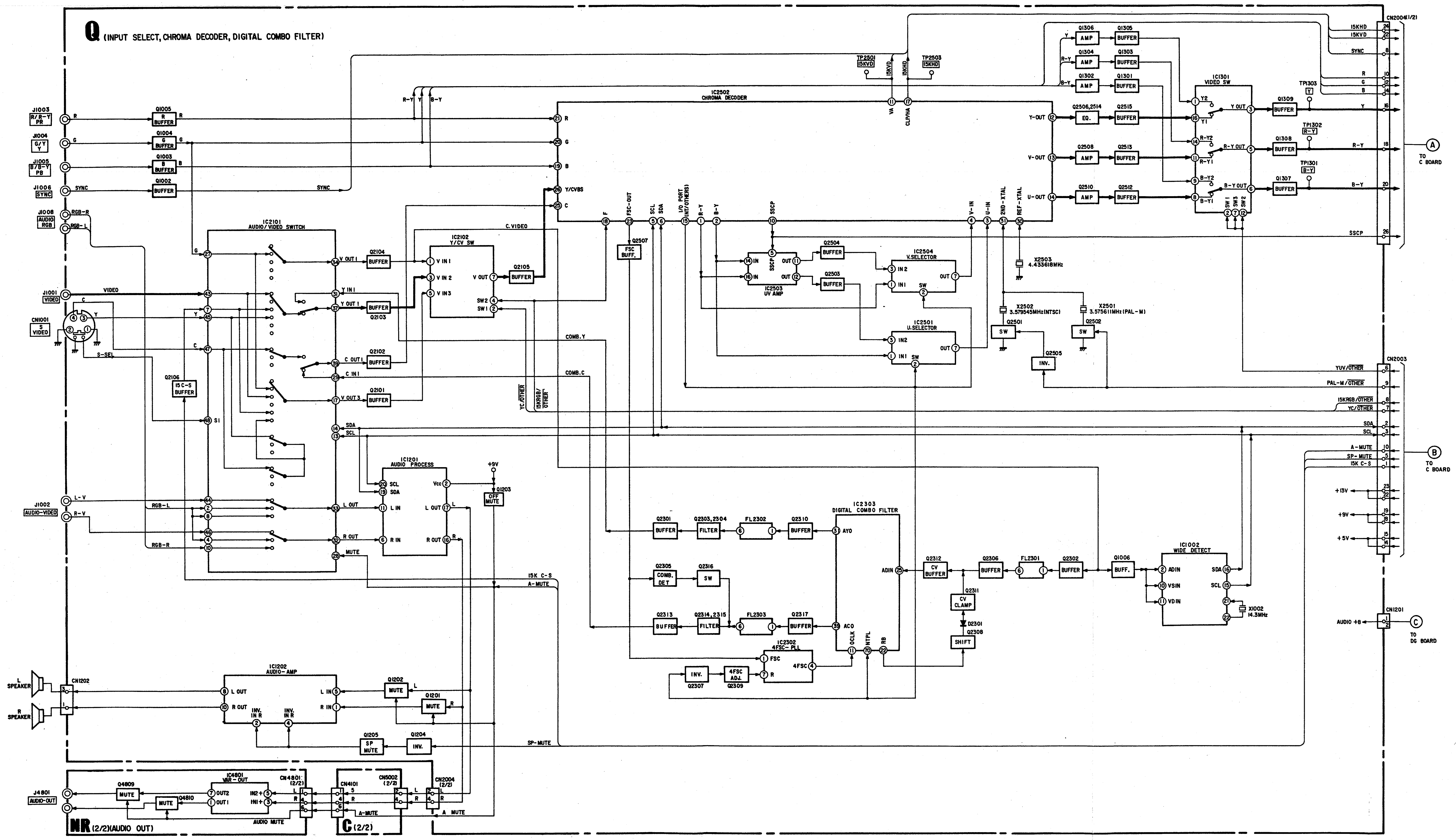
4. In the same way as step 3, adjust R3 GAIN and R3 BIAS until the added waveform of the inverted R-SIG3 (TP4520) with the reference signal at TP4521 (R-SIG2) becomes flat.
5. Adjust the green channel and blue channel in the same way as the red channel.

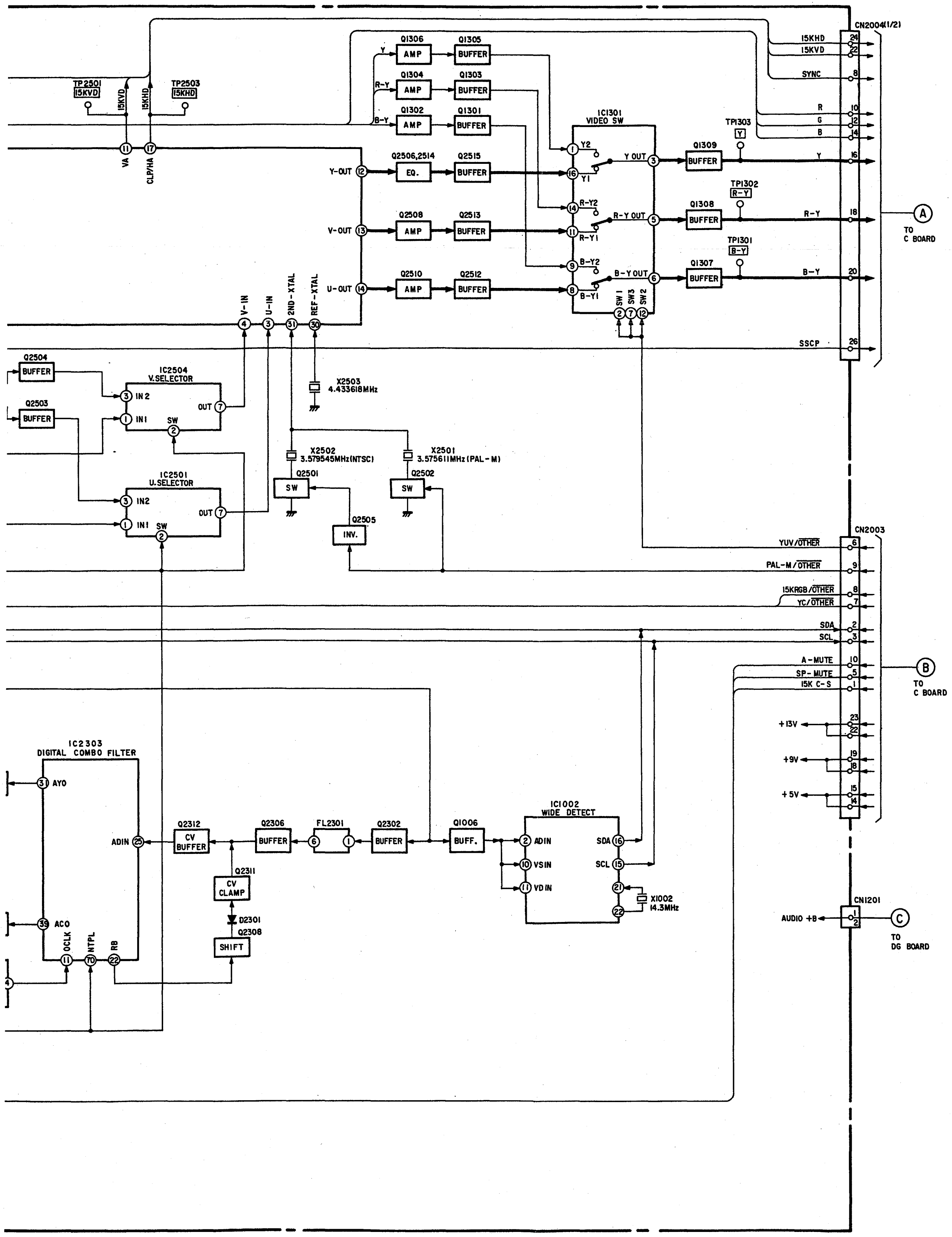
6. Use the menu and enter H POLARITY, select REVERSE.
7. Perform the GAIN and BIAS adjustment for SIG1 and SIG3 with reference to SIG2, of the red, green and blue channels.

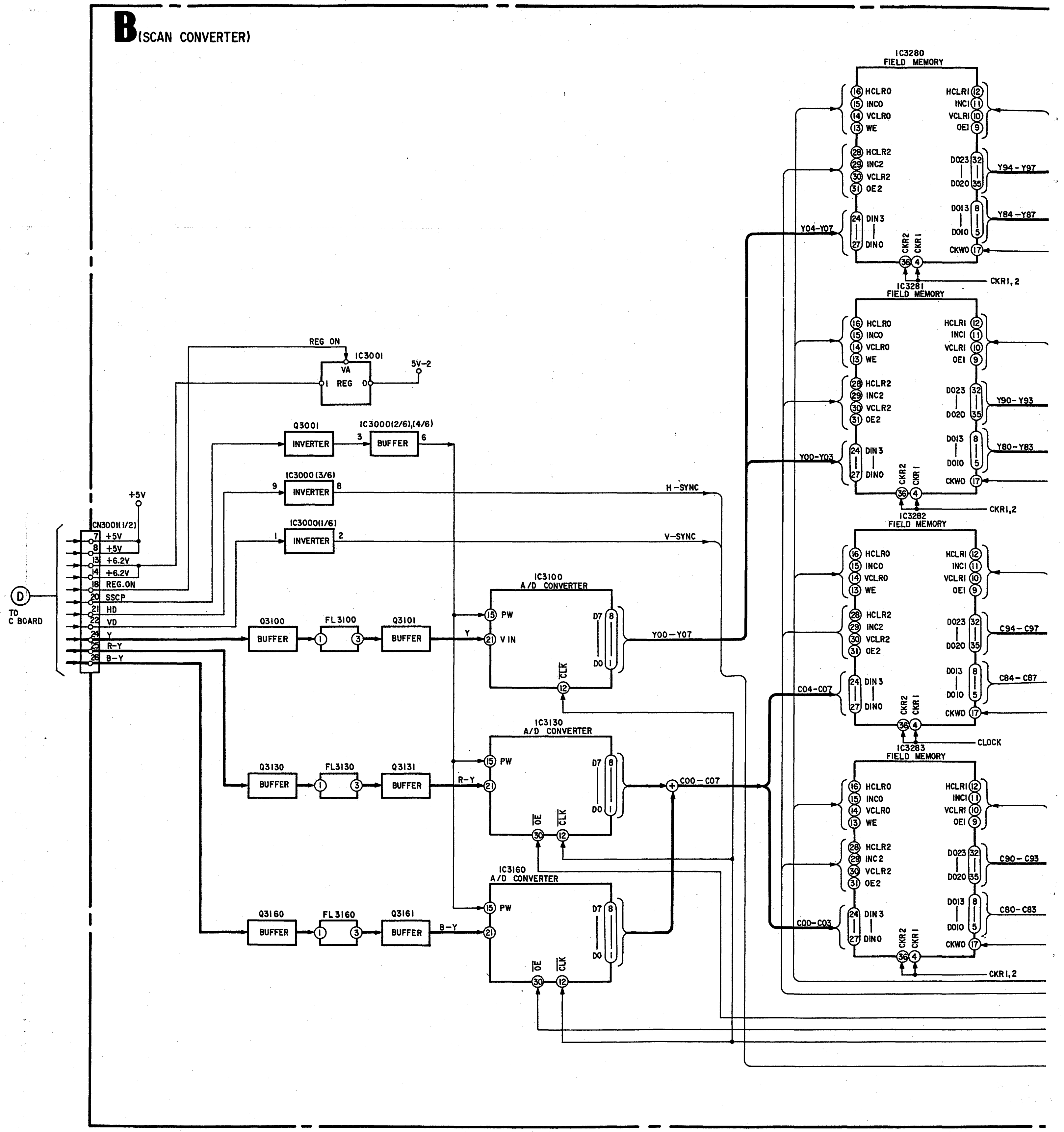
	Reference	Adjustment point	Adjustment data
G	TP4515 (G-SIG2)	G-SIG1 (TP4516)	G1 GAIN G1 BIAS
		G-SIG3 (TP4514)	G3 GAIN G3 BIAS
B	TP4525 (B-SIG2)	B-SIG1 (TP4527)	B1 GAIN B1 BIAS
		B-SIG3 (TP4524)	B1 GAIN B1 BIAS

SECTION 5
DIAGRAMS

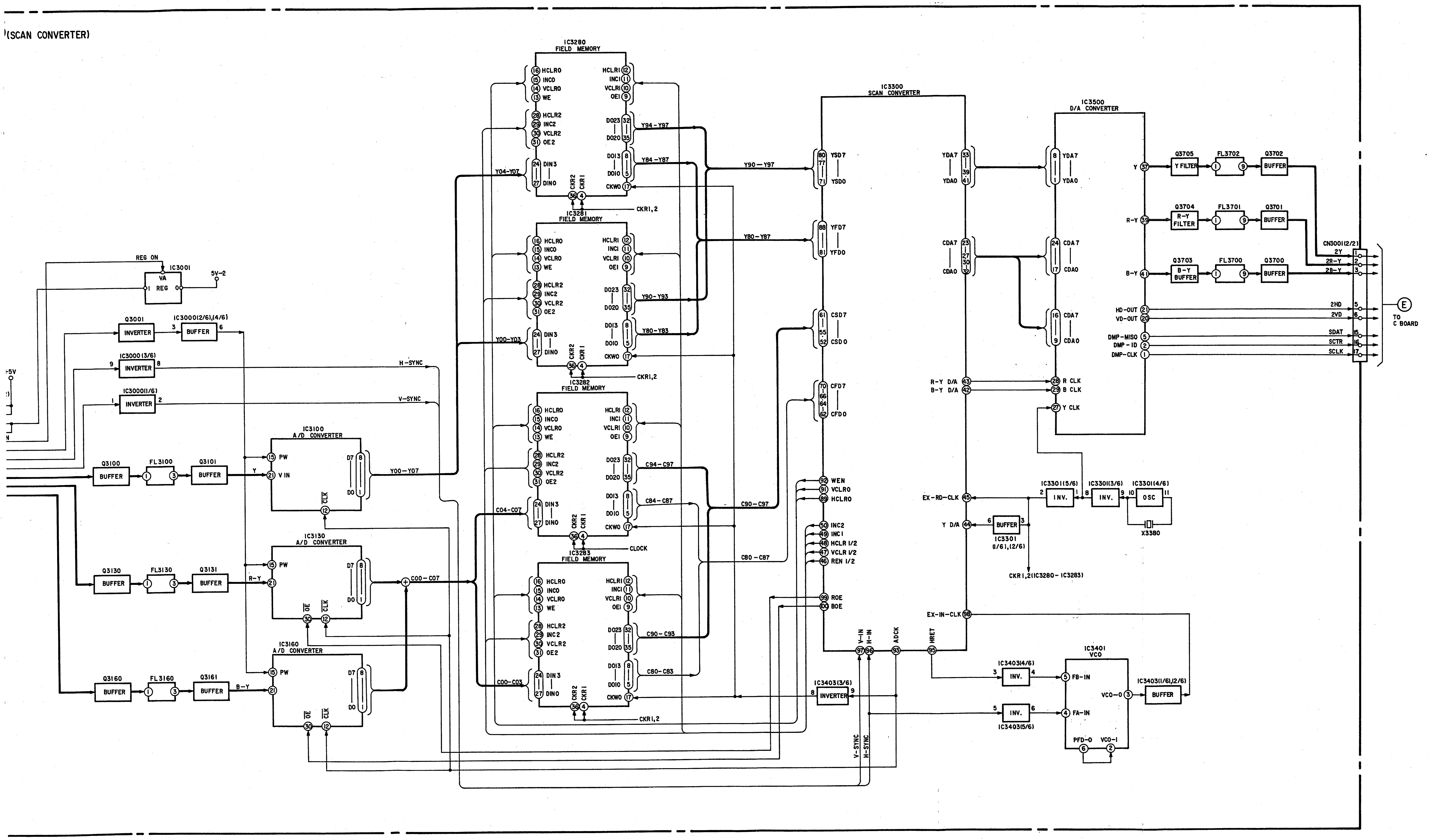
5-1. BLOCK DIAGRAMS

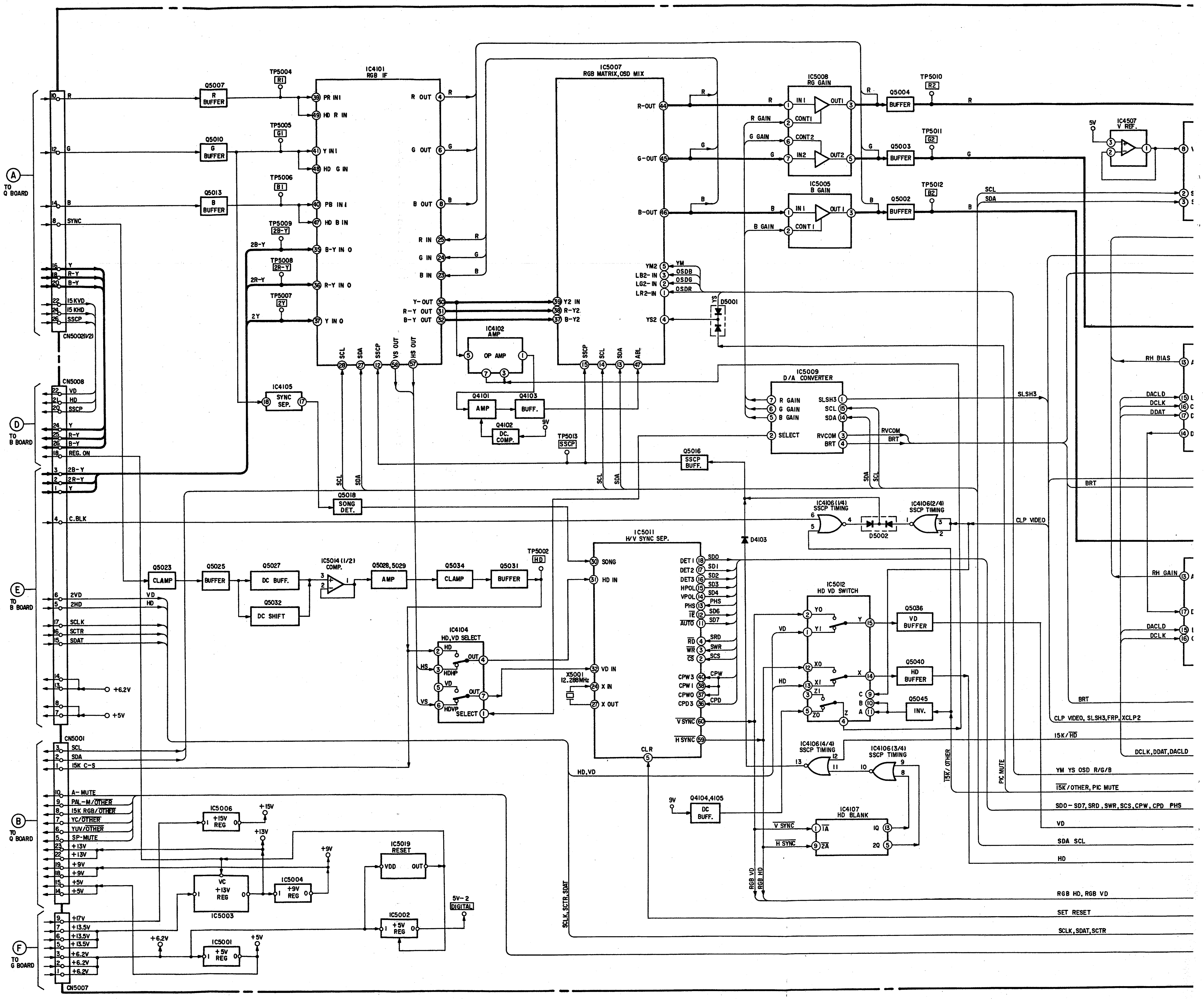

Q (INPUT SELECT, CHROMA DECODER, DIGITAL COMBO FILTER)
J1003 R/R-Y PR
J1004 G/Y Y
J1005 B/B-Y PB
J1006 SYNC
J1008 AUDIO RGB
J1001 VIDEO
CN1001 S VIDEO
J1002 AUDIO-VIDEO
Q1005 R BUFFER
Q1004 G BUFFER
Q1003 B BUFFER
Q1002 BUFFER
Q2106 15C-S BUFFER
IC2101 AUDIO/VIDEO SWITCH
IC2102 Y/CV SW
Q2104 BUFFER
Q2103 BUFFER
Q2102 BUFFER
Q2101 BUFFER
Q2105 BUFFER
IC2502 CHROMA DECODER
Q2507 FSC BUFF.
IC2503 UV AMP
Q2504 BUFFER
Q2503 BUFFER
IC2504 V.SELECTOR
IC2501 U.SELECTOR
X2503 4.433618MHz
X2502 3.579545MHz(NTSC)
X2501 3.575611MHz(PAL-M)
Q2501 SW
Q2502 SW
Q2505 INV.
Q1306 AMP
Q1305 BUFFER
Q1304 AMP
Q1303 BUFFER
Q1302 AMP
Q1301 BUFFER
Q2506,2514 EQ.
Q2515 BUFFER
Q2508 AMP
Q2513 BUFFER
Q2510 AMP
Q2512 BUFFER
IC1301 VIDEO SW
Q1309 BUFFER
Q1308 BUFFER
Q1307 BUFFER
TP1303 Y
TP1302 R-Y
TP1301 B-Y
TP2501 15KVD
TP2503 15KHD
CN2004(1/21)
15KHD
15KVD
SYNC
SSCP
TO C BOARD
CN2003
YUV/OTHER
PAL-M/OTHER
15KRGB/OTHER
YC/OTHER
SDA
SCL
A-MUTE
SP-MUTE
15K C-S
+13V
+9V
+5V
CN1201
AUDIO +B
TO DG BOARD
IC1201 AUDIO PROCESS
Q1203 OFF MUTE
IC2303 DIGITAL COMBO FILTER
Q2301 BUFFER
Q2303,2304 FILTER
FL2302
Q2310 BUFFER
Q2305 COMB. DET
Q2316 SW
Q2313 BUFFER
Q2314,2315 FILTER
FL2303
Q2317 BUFFER
IC2302 4FSC-PLL
Q2307 INV.
Q2309 4FSC ADJ.
Q2312 CV BUFFER
Q2306 BUFFER
FL2301
Q2302 BUFFER
Q1006 BUFF.
Q2311 CV CLAMP
D2301
Q2308 SHIFT
IC1002 WIDE DETECT
X1002 14.3MHz
IC1202 AUDIO-AMP
CN1202
L SPEAKER
R SPEAKER
Q1202 MUTE
Q1201 MUTE
Q1205 SP MUTE
Q1204 INV.
J4801 AUDIO-OUT
Q4809 MUTE
Q4810 MUTE
IC4801 VAR-OUT
CN4801 (2/21)
AUDIO MUTE
NR (2/2)(AUDIO OUT)
CN4101
CN5002 (2/2)
A-MUTE
C (2/2)
CN2004 (2/2)
A MUTE

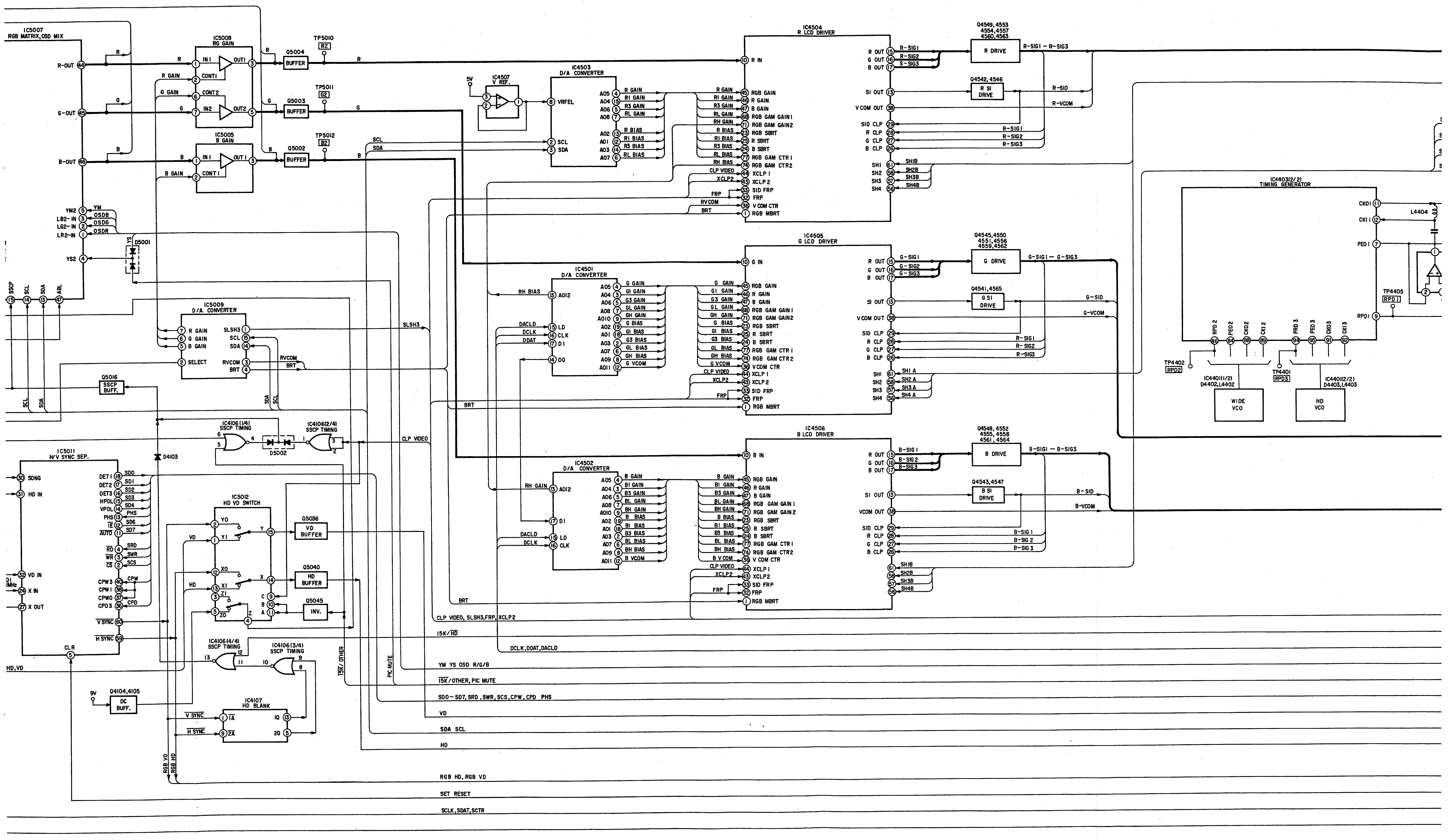

CN2004(1/2)
IC1301 VIDEO SW
Q1306 AMP
Q1305 BUFFER
Q1304 AMP
Q1303 BUFFER
Q1302 AMP
Q1301 BUFFER
Q2506,2514 EQ.
Q2515 BUFFER
Q2508 AMP
Q2513 BUFFER
Q2510 AMP
Q2512 BUFFER
Q1309 BUFFER
Q1308 BUFFER
Q1307 BUFFER
TP1303 Y
TP1302 R-Y
TP1301 B-Y
TP2501 15KVD
TP2503 15KHD
15KHD
15KVD
SYNC
R
G
B
Y
R-Y
B-Y
SSCP
TO C BOARD
IC2504 V.SELECTOR
IC2501 U.SELECTOR
Q2504 BUFFER
Q2503 BUFFER
X2503 4.433618MHz
X2502 3.579545MHz(NTSC)
X2501 3.575611MHz(PAL-M)
Q2501 SW
Q2502 SW
Q2505 INV.
CN2003
YUV/OTHER
PAL-M/OTHER
15KRGB/OTHER
YC/OTHER
SDA
SCL
A-MUTE
SP-MUTE
15K C-S
+13V
+9V
+5V
IC2303 DIGITAL COMBO FILTER
Q2312 CV BUFFER
Q2306 BUFFER
FL2301
Q2302 BUFFER
Q1006 BUFF.
IC1002 WIDE DETECT
X1002 14.3MHz
Q2311 CV CLAMP
D2301
Q2308 SHIFT
CN1201
AUDIO +8
TO DG BOARD

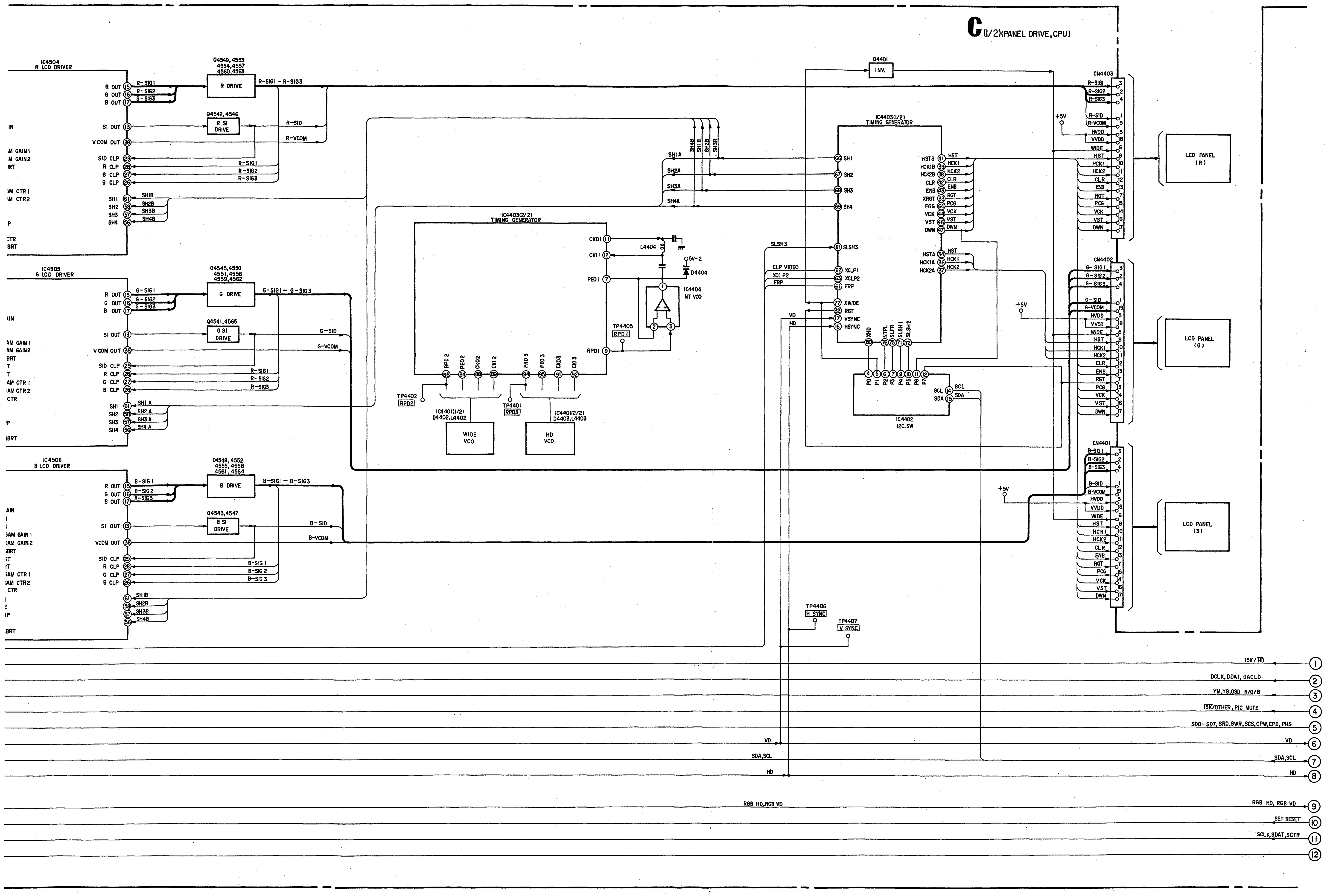

B (SCAN CONVERTER)
IC3280 FIELD MEMORY
IC3281 FIELD MEMORY
IC3282 FIELD MEMORY
IC3283 FIELD MEMORY
HCLR0
INC0
VCLR0
WE
HCLR2
INC2
VCLR2
OE2
DIN3
DIN0
CKR2
CKR1
HCLR1
INC1
VCLR1
OE1
DO23
DO20
DO13
DO10
CKWO
Y94-Y97
Y84-Y87
Y90-Y93
Y80-Y83
C94-C97
C84-C87
C90-C93
C80-C83
Y04-Y07
Y00-Y03
C04-C07
C00-C03
CKR1,2
CLOCK
REG ON
IC3001 REG
5V-2
Q3001 INVERTER
IC3000(2/6),(4/6) BUFFER
IC3000(3/6) INVERTER
IC3000(1/6) INVERTER
H-SYNC
V-SYNC
+5V
CN3001(1/2)
+5V
+5V
+6.2V
+6.2V
REG.ON
SSCP
HD
VD
Y
R-Y
B-Y
TO C BOARD
IC3100 A/D CONVERTER
IC3130 A/D CONVERTER
IC3160 A/D CONVERTER
PW
V IN
OE
CLK
D7
D0
Q3100 BUFFER
FL3100
Q3101 BUFFER
Q3130 BUFFER
FL3130
Q3131 BUFFER
Q3160 BUFFER
FL3160
Q3161 BUFFER
Y00-Y07
C00-C07

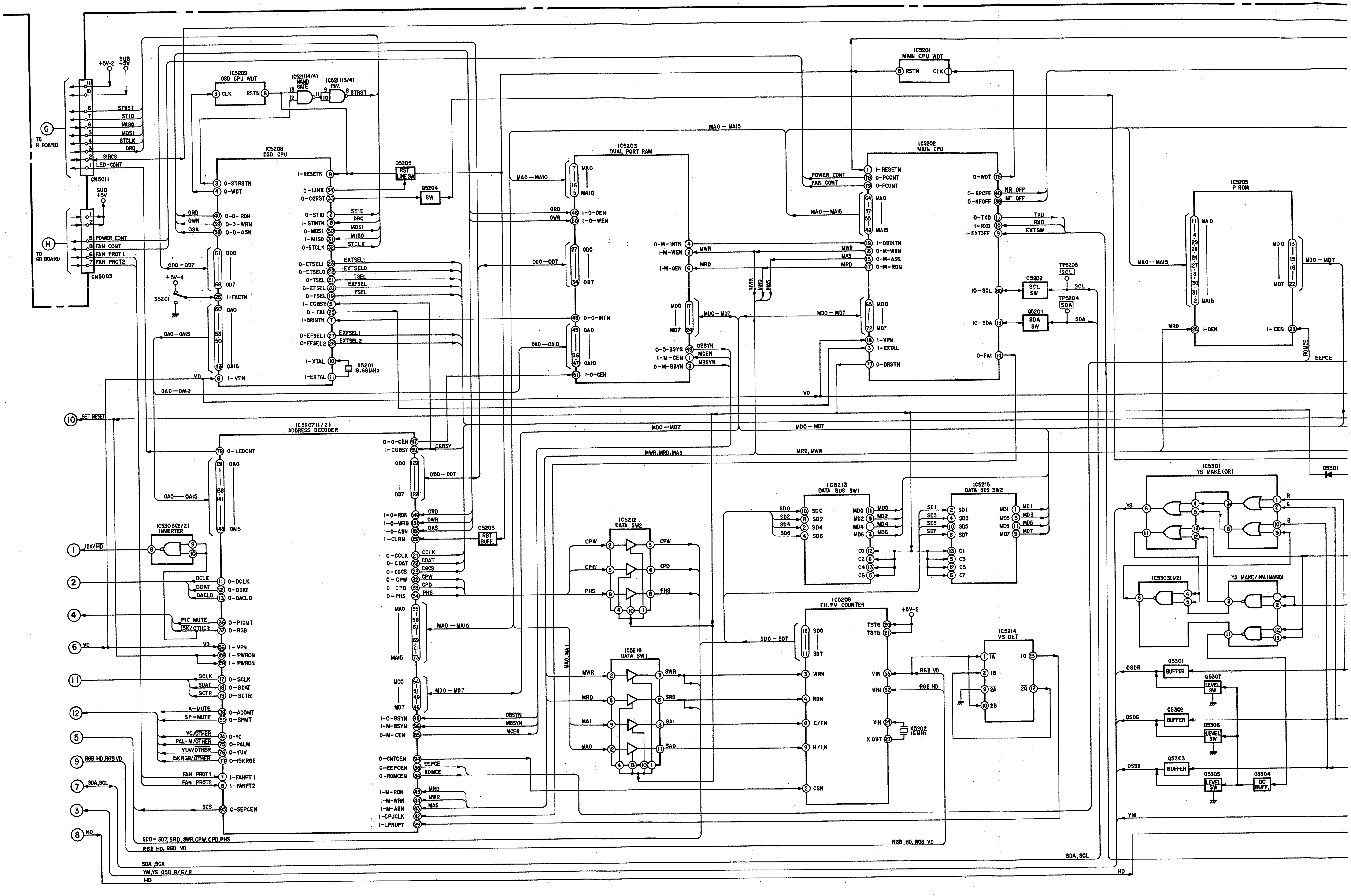
(SCAN CONVERTER)

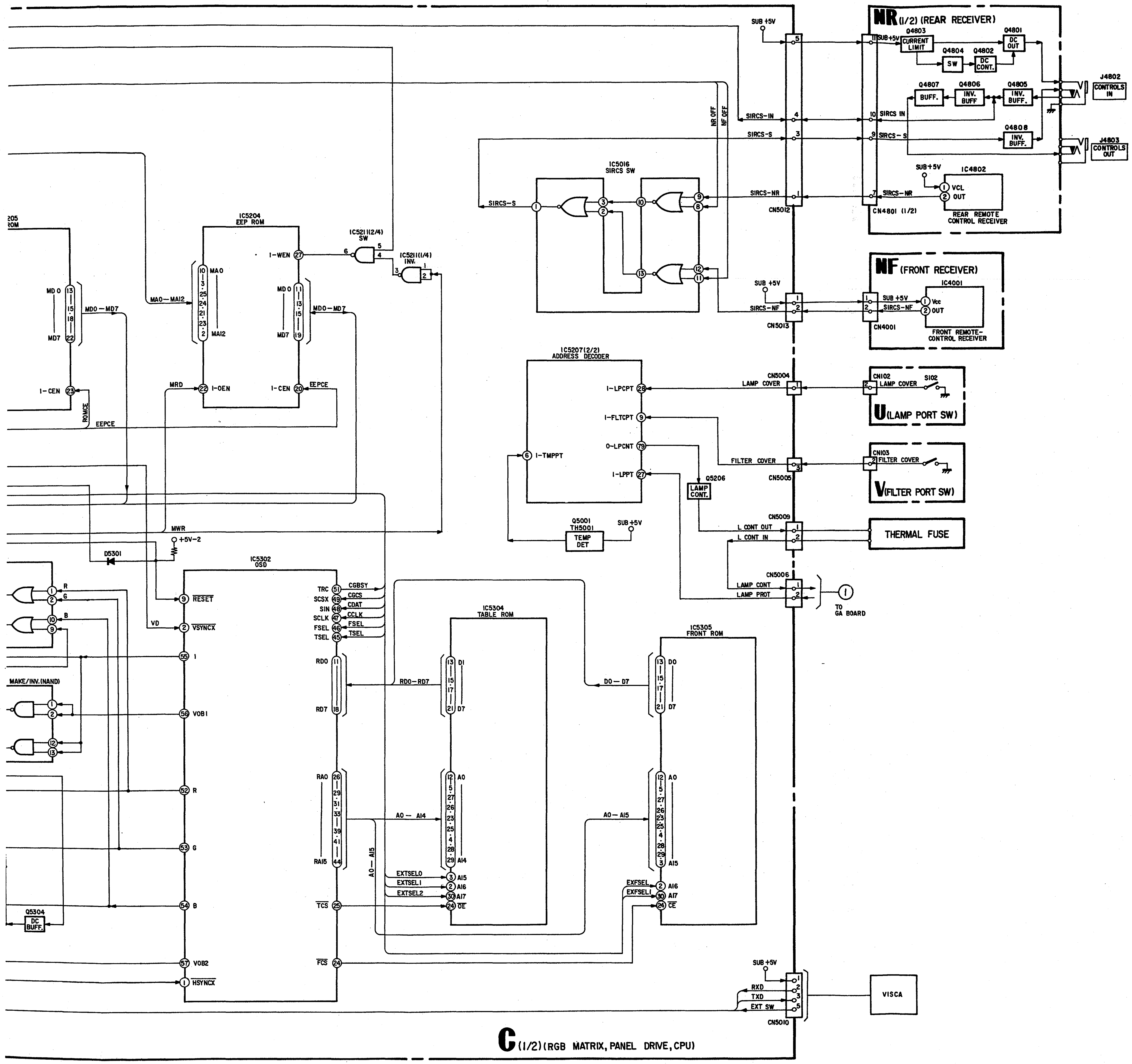

IC3280
FIELD MEMORY
IC3281
FIELD MEMORY
IC3282
FIELD MEMORY
IC3283
FIELD MEMORY
HCLR0
INC0
VCLR0
WE
HCLR2
INC2
VCLR2
OE2
DIN3
DIN0
HCLR1
INC1
VCLR1
OE1
DO23
DO20
DO13
DO10
CKWO
CKR2
CKR1
CKR1,2
CLOCK
Y94-Y97
Y84-Y87
Y90-Y93
Y80-Y83
Y04-Y07
Y00-Y03
C94-C97
C84-C87
C90-C93
C80-C83
C04-C07
C00-C03
Y90-Y97
Y80-Y87
C90-C97
C80-C87
IC3300
SCAN CONVERTER
YSD7
YSD0
YFD7
YFD0
CSD7
CSD0
CFD7
CFD0
WEN
VCLR0
HCLR0
INC2
INC1
HCLR 1/2
VCLR 1/2
REN 1/2
ROE
BOE
V-IN
H-IN
ADCK
HRET
YDA7
YDA0
CDA7
CDA0
R-Y D/A
B-Y D/A
EX-RD-CLK
Y D/A
EX-IN-CLK
IC3500
D/A CONVERTER
R CLK
B CLK
Y CLK
Y
R-Y
B-Y
HD-OUT
VD-OUT
DMP-MISO
DMP-ID
DMP-CLK
Q3705
Y FILTER
FL3702
Q3702
BUFFER
Q3704
R-Y FILTER
FL3701
Q3701
Q3703
B-Y BUFFER
FL3700
Q3700
CN3001(2/2)
2Y
2R-Y
2B-Y
2HD
2VD
SDAT
SCTR
SCLK
E
TO C BOARD
IC3301(5/6)
INV.
IC3301(3/6)
IC3301(4/6)
OSC
X3380
IC3301 (1/6),(2/6)
CKR1,2(IC3280-IC3283)
IC3401
VCO
FB-IN
FA-IN
PFD-O
VCO-I
VCO-O
IC3403(4/6)
IC3403(5/6)
IC3403(1/6),(2/6)
IC3403(3/6)
INVERTER
V-SYNC
H-SYNC
REG ON
IC3001
VA
REG
5V-2
Q3001
INVERTER
IC3000(2/6),(4/6)
IC3000(3/6)
IC3000(1/6)
+5V
IC3100
A/D CONVERTER
IC3130
A/D CONVERTER
IC3160
A/D CONVERTER
PW
V IN
D7
D0
CLK
OE
Y00-Y07
C00-C07
Q3100
FL3100
Q3101
Q3130
FL3130
Q3131
Q3160
FL3160
Q3161
R-Y
B-Y

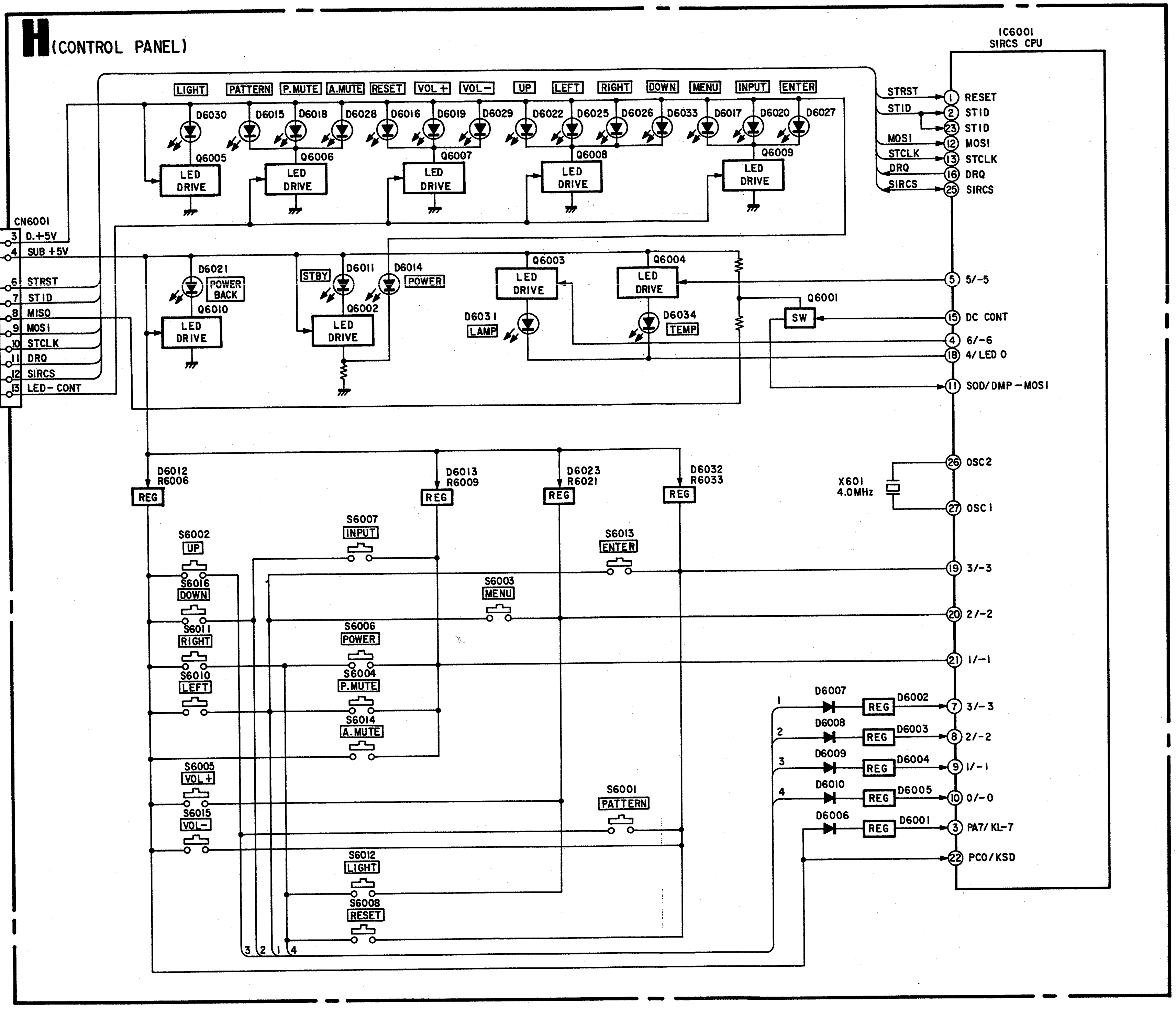

IC4101
RGB IF
IC5007
RGB MATRIX, OSD MIX
IC5008
RG GAIN
IC5005
B GAIN
IC4507
V REF.
Q5007
R BUFFER
Q5010
G BUFFER
Q5013
B BUFFER
Q5004
Q5003
Q5002
BUFFER
TP5004
TP5005
TP5006
TP5009
TP5008
TP5007
TP5010
TP5011
TP5012
TP5013
TP5002
A
TO Q BOARD
D
TO B BOARD
E
TO B BOARD
B
TO Q BOARD
F
TO G BOARD
CN5002(1/2)
CN5008
CN5001
CN5007
SYNC
15KVD
15KHD
SSCP
REG. ON
2B-Y
2R-Y
C.BLK
2VD
2HD
SCLK
SCTR
SDAT
+6.2V
+5V
SCL
SDA
15K C-S
A-MUTE
PAL-M/OTHER
15K RGB/OTHER
YC/OTHER
YUV/OTHER
SP-MUTE
+13V
+9V
+17V
+13.5V
PR IN1
HD R IN
Y IN1
HD G IN
PB IN1
HD B IN
B-Y IN 0
R-Y IN 0
Y IN 0
R OUT
G OUT
B OUT
R IN
G IN
B IN
Y-OUT
R-Y OUT
B-Y OUT
VS OUT
HS OUT
R-OUT
G-OUT
B-OUT
YM2
LB2-IN
LG2-IN
LR2-IN
YS2
Y2 IN
R-Y2
B-Y2
ABL
OSDB
OSDG
OSDR
D5001
IC4102
AMP
OP AMP
Q4101
AMP
Q4103
BUFF.
Q4102
DC COMP.
9V
IC4105
SYNC SEP.
Q5018
SONG DET.
Q5016
SSCP BUFF.
R GAIN
G GAIN
B GAIN
CONT1
CONT2
IN1
IN2
OUT1
OUT2
IC5009
D/A CONVERTER
SELECT
SLSH3
RVCOM
BRT
RH BIAS
DACLD
DCLK
DDAT
RH GAIN
IC4106(1/4)
SSCP TIMING
IC4106(2/4)
SSCP TIMING
D5002
D4103
CLP VIDEO
IC5011
H/V SYNC SEP.
SONG
HD IN
VD IN
X IN
X OUT
X5001
12.288MHz
DET1
DET2
DET3
HPOL
VPOL
PHS
IE
AUTO
RD
WR
CS
CPW3
CPW1
CPW0
CPD3
V SYNC
H SYNC
CLR
SD0
SD1
SD2
SD3
SD4
SD6
SD7
SRD
SWR
SCS
CPW
CPD
Q5023
CLAMP
Q5025
BUFFER
Q5027
DC BUFF.
Q5032
DC SHIFT
IC5014(1/2)
COMP.
Q5028, 5029
AMP
Q5034
CLAMP
Q5031
BUFFER
IC4104
HD, VD SELECT
HDHP
HDVP
SELECT
HS
VS
IC5012
HD VD SWITCH
Q5036
VD BUFFER
Q5040
HD BUFFER
Q5045
INV.
IC4106(4/4)
SSCP TIMING
IC4106(3/4)
SSCP TIMING
Q4104, 4105
DC BUFF.
IC4107
HD BLANK
HD, VD
15K/OTHER
PIC MUTE
RGB VD
RGB HD
SCLK, SCTR, SDAT
IC5006
+15V REG
+15V
+13V
IC5003
VC +13V REG
IC5004
+9V REG
IC5019
RESET
VDD
OUT
5V-2
DIGITAL
IC5002
+5V REG
IC5001
+5V REG
+6.2V
BRT
CLP VIDEO, SLSH3, FRP, XCLP2
15K/HD
DCLK, DDAT, DACLD
YM YS OSD R/G/B
15K/OTHER, PIC MUTE
SD0-SD7, SRD, SWR, SCS, CPW, CPD PHS
VD
SDA SCL
HD
RGB HD, RGB VD
SET RESET
SCLK, SDAT, SCTR

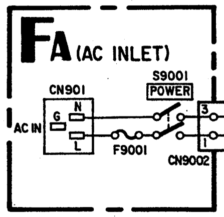

IC5007
RGB MATRIX,OSD MIX
R-OUT
G-OUT
B-OUT
YM2
LB2-IN
LG2-IN
LR2-IN
YS2
D5001
IC5008
RG GAIN
IC5005
B GAIN
R GAIN
G GAIN
B GAIN
IN1
IN2
CONT1
CONT2
OUT1
OUT2
Q5004
Q5003
Q5002
BUFFER
TP5010
TP5011
TP5012
R2
G2
B2
SCL
SDA
IC4507
V REF.
5V
IC4503
D/A CONVERTER
VRFEL
R GAIN
R1 GAIN
R3 GAIN
RL GAIN
R BIAS
R1 BIAS
R3 BIAS
RL BIAS
IC4504
R LCD DRIVER
R IN
RGB GAIN
R GAIN
B GAIN
RGB GAM GAIN1
RGB GAM GAIN2
RGB SBRT
R SBRT
B SBRT
RGB GAM CTR1
RGB GAM CTR2
XCLP1
XCLP2
SID FRP
FRP
V COM CTR
RGB MBRT
RH GAIN
RH BIAS
CLP VIDEO
RVCOM
BRT
R OUT
G OUT
B OUT
S1 OUT
V COM OUT
SID CLP
R CLP
G CLP
B CLP
SH1
SH2
SH3
SH4
SH1B
SH2B
SH3B
SH4B
R-SIG1
R-SIG2
S-SIG3
Q4549,4553
4554,4557
4560,4563
R DRIVE
R-SIG1 - R-SIG3
Q4542,4546
R S1
DRIVE
R-SID
R-VCOM
IC4505
G LCD DRIVER
G IN
Q4545,4550
4551,4556
4559,4562
G DRIVE
G-SIG1 - G-SIG3
Q4541,4565
G S1
DRIVE
G-SID
G-VCOM
SH1 A
SH2 A
SH3 A
SH4 A
IC4501
D/A CONVERTER
A012
LD
CLK
D1
D0
G GAIN
G1 GAIN
G3 GAIN
GL GAIN
GH GAIN
G BIAS
G1 BIAS
G3 BIAS
GL BIAS
GH BIAS
G VCOM
DACLD
DCLK
DDAT
IC4506
B LCD DRIVER
B IN
Q4548,4552
4555,4558
4561,4564
B DRIVE
B-SIG1 - B-SIG3
Q4543,4547
B S1
DRIVE
B-SID
B-VCOM
IC4502
D/A CONVERTER
B GAIN
B1 GAIN
B3 GAIN
BL GAIN
BH GAIN
B BIAS
B1 BIAS
B3 BIAS
BL BIAS
BH BIAS
B VCOM
IC4403(2/2)
TIMING GENERATOR
CK01
CK11
PED1
RPD1
L4404
TP4405
RPD1
RPD2
PED2
CK02
CK12
PRD3
PED3
CK03
CK13
TP4402
RPD2
TP4401
RPD3
IC4401(1/2)
D4402,L4402
WIDE
VCO
IC4401(2/2)
D4403,L4403
HD
VCO
IC5009
D/A CONVERTER
SLSH3
SELECT
Q5016
SSCP
BUFF.
SSCP
SCL
SDA
ABL
IC4106(1/4)
SSCP TIMING
IC4106(2/4)
SSCP TIMING
D5002
D4103
IC5011
H/V SYNC SEP.
SONG
HD IN
DET1
DET2
DET3
HPOL
VPOL
PHS
IE
AUTO
RD
WR
CS
CPW3
CPW1
CPW0
CPD3
V SYNC
H SYNC
CLR
VD IN
X IN
X OUT
SD0
SD1
SD2
SD3
SD4
SD6
SD7
SRD
SWR
SCS
CPW
CPD
HD,VD
IC5012
HD VD SWITCH
Q5036
VD
BUFFER
Q5040
HD
BUFFER
Q5045
INV.
IC4106(4/4)
SSCP TIMING
IC4106(3/4)
SSCP TIMING
IC4107
HD BLANK
9V
Q4104,4105
DC
BUFF.
RGB VD
RGB HD
15K/OTHER
PIC MUTE
CLP VIDEO, SLSH3,FRP, XCLP2
15K/HD
DCLK,DDAT,DACLD
YM YS OSD R/G/B
15K/OTHER, PIC MUTE
SD0-SD7,SRD,SWR,SCS,CPW,CPD PHS
VD
SDA SCL
HD
RGB HD, RGB VD
SET RESET
SCLK,SDAT,SCTR

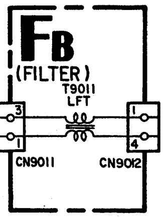

C (1/2)(PANEL DRIVE, CPU)
IC4504 R LCD DRIVER
IC4505 G LCD DRIVER
IC4506 B LCD DRIVER
R OUT
G OUT
B OUT
SI OUT
V COM OUT
SID CLP
R CLP
G CLP
B CLP
SH1
SH2
SH3
SH4
Q4549, 4553 4554, 4557 4560, 4563
R DRIVE
R-SIG1 – R-SIG3
Q4542, 4546
R SI DRIVE
R-SID
R-VCOM
Q4545, 4550 4551, 4556 4559, 4562
G DRIVE
G-SIG1 – G-SIG3
Q4541, 4565
G SI DRIVE
G-SID
G-VCOM
Q4548, 4552 4555, 4558 4561, 4564
B DRIVE
B-SIG1 – B-SIG3
Q4543, 4547
B SI DRIVE
B-SID
B-VCOM
SH1A
SH2A
SH3A
SH4A
SH1B
SH2B
SH3B
SH4B
IC4403(2/2) TIMING GENERATOR
CKO1
CKI1
PEO1
RPD1
RPD2
PEO2
CKO2
CKI2
RPD3
PEO3
CKO3
CKI3
L4404
5V-2
D4404
IC4404 NT VCO
TP4405 RPD1
TP4402 RPD2
TP4401 RPD3
IC4401(1/2) D4402, L4402
WIDE VCO
IC4401(2/2) D4403, L4403
HD VCO
Q4401
INV.
IC4403(1/2) TIMING GENERATOR
SLSH3
CLP VIDEO
XCLP2
FRP
XCLP1
XWIDE
RGT
VSYNC
HSYNC
VD
HD
XHD
INTPL
SLFR
SLSH1
SLSH2
HSTB
HCK1B
HCK2B
CLR
ENB
XRGT
PRG
VCK
VST
DWN
HST
HCK1
HCK2
PCG
HSTA
HCK1A
HCK2A
IC4402 I2C.SW
P0
P1
P2
P3
P4
P5
P6
P7
SCL
SDA
CN4403
CN4402
CN4401
+5V
R-SID
R-VCOM
G-SID
G-VCOM
B-SID
B-VCOM
HVDD
VVDD
WIDE
LCD PANEL (R)
LCD PANEL (G)
LCD PANEL (B)
TP4406 H SYNC
TP4407 V SYNC
15K/HD
DCLK, DDAT, DACLD
YM, YS, OSD R/G/B
15K/OTHER, PIC MUTE
SDO-SD7, SRD, SWR, SCS, CPW, CPD, PHS
VD
SDA, SCL
HD
RGB HD, RGB VD
SET RESET
SCLK, SDAT, SCTR
①
②
③
④
⑤
⑥
⑦
⑧
⑨
⑩
⑪
⑫

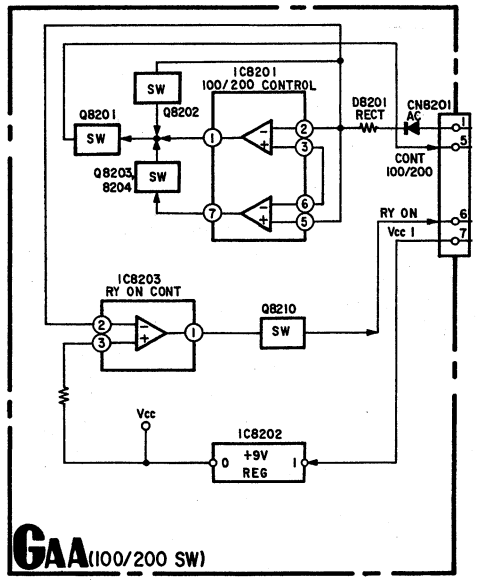

TO H BOARD
CN5011
TO GB BOARD
CN5003
+5V-2
SUB +5V
STRST
STID
MISO
MOSI
STCLK
DRQ
SIRCS
LED-CONT
POWER CONT
FAN CONT
FAN PROT1
FAN PROT2
IC5209 OSD CPU WDT
IC5211(4/4) NAND GATE
IC5211(3/4) INV.
IC5208 OSD CPU
Q5205 RST LINE SW
Q5204 SW
S5201
X5201 19.66MHz
IC5203 DUAL PORT RAM
MA0—MA15
MA0—MA10
OD0—OD7
OA0—OA15
OA0—OA10
MD0—MD7
IC5201 MAIN CPU WDT
IC5202 MAIN CPU
TP5203 SCL
TP5204 SDA
Q5202 SCL SW
Q5201 SDA SW
IC5205 P ROM
EEPCE
ROMCE
SET RESET
IC5207(1/2) ADDRESS DECODER
IC5303(2/2) INVERTER
15K/HD
VD
RGB HD, RGB VD
SDA, SCL
HD
Q5203 RST BUFF.
IC5212 DATA SW2
IC5210 DATA SW1
IC5213 DATA BUS SW1
IC5215 DATA BUS SW2
IC5206 FH. FV COUNTER
X5202 16MHz
IC5214 VS DET
D5301
IC5301 YS MAKE (OR)
IC5303(1/2)
YS MAKE/INV.(NAND)
Q5301 BUFFER
Q5302 BUFFER
Q5303 BUFFER
Q5307 LEVEL SW
Q5306 LEVEL SW
Q5305 LEVEL SW
Q5304 DC BUFF.
OSDR
OSDG
OSDB
YM
YS
SD0—SD7, SRD, SWR, CPW, CPD, PHS
RGB HD, RGD VD
SDA, SCA
YM, YS OSD R/G/B
MWR, MRD, MAS
MRD, MWR

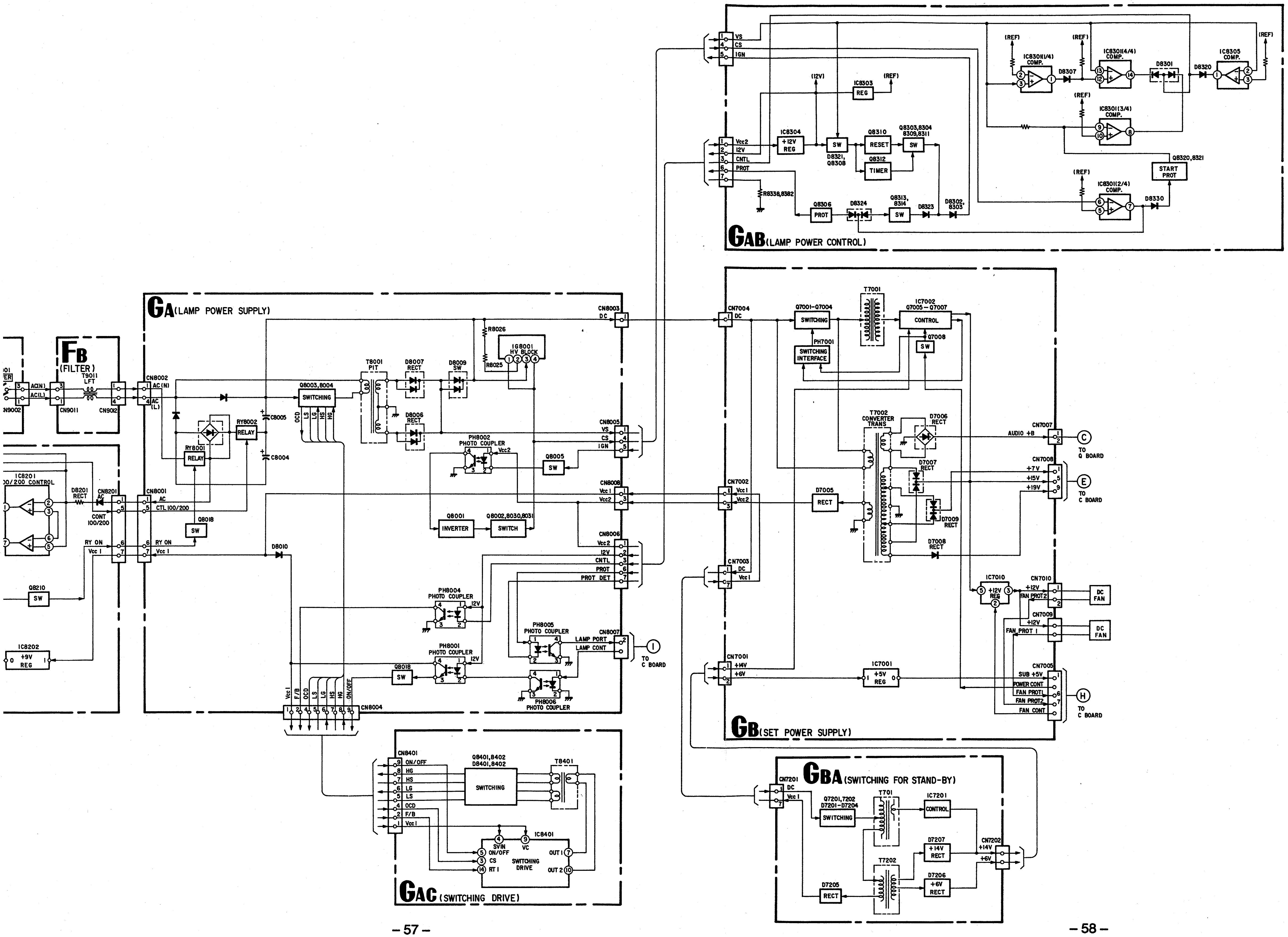

NR (1/2) (REAR RECEIVER)
Q4803 CURRENT LIMIT
Q4801 DC OUT
Q4804 SW
Q4802 DC CONT.
Q4807 BUFF.
Q4806 INV. BUFF
Q4805 INV. BUFF.
Q4808 INV. BUFF.
J4802 CONTROLS IN
J4803 CONTROLS OUT
SUB +5V
IC4802
VCL
OUT
REAR REMOTE CONTROL RECEIVER
SIRCS IN
SIRCS-S
SIRCS-NR
CN4801 (1/2)
SIRCS-IN
CN5012
NR OFF
NF OFF
IC5016 SIRCS SW
IC5204 EEP ROM
IC5211 (2/4) SW
IC5211 (1/4) INV.
I-WEN
MA0
MA12
MA0 — MA12
MD0
MD7
MD0 — MD7
I-CEN
I-OEN
EEPCE
ROMCE
MRD
MWR
+5V-2
D5301
NF (FRONT RECEIVER)
IC4001
SUB +5V
SIRCS-NF
Vcc
OUT
CN4001
FRONT REMOTE-CONTROL RECEIVER
CN5013
IC5207 (2/2) ADDRESS DECODER
I-LPCPT
I-FLTCPT
O-LPCNT
I-LPPT
I-TMPPT
CN5004
LAMP COVER
CN102
S102
U (LAMP PORT SW)
CN5005
FILTER COVER
Q5206 LAMP CONT.
CN103
V (FILTER PORT SW)
Q5001 TH5001 TEMP DET
CN5009
L CONT OUT
L CONT IN
THERMAL FUSE
CN5006
LAMP CONT
LAMP PROT
TO GA BOARD
IC5302 OSD
RESET
VSYNCX
VD
TRC
SCSX
SIN
SCLK
FSEL
TSEL
CGBSY
CGCS
CDAT
CCLK
RD0
RD7
RD0 — RD7
RA0
RA15
A0 — A14
A0 — A15
TCS
FCS
VOB1
VOB2
HSYNCX
R
G
B
MAKE/INV.(NAND)
Q5304 DC BUFF.
IC5304 TABLE ROM
D0 — D7
A0
A14
AI5
AI6
AI7
OE
EXTSEL0
EXTSEL1
EXTSEL2
IC5305 FRONT ROM
EXFSEL
EXFSEL1
RXD
TXD
EXT SW
CN5010
VISCA
C (1/2) (RGB MATRIX, PANEL DRIVE, CPU)


H (CONTROL PANEL)
IC6001
SIRCS CPU
LIGHT
PATTERN
P.MUTE
A.MUTE
RESET
VOL +
VOL −
UP
LEFT
RIGHT
DOWN
MENU
INPUT
ENTER
D6030
D6015
D6018
D6028
D6016
D6019
D6029
D6022
D6025
D6026
D6033
D6017
D6020
D6027
Q6005
Q6006
Q6007
Q6008
Q6009
LED DRIVE
CN6001
D.+5V
SUB +5V
STRST
STID
MISO
MOSI
STCLK
DRQ
SIRCS
LED-CONT
G
TO C BOARD
D6021
POWER BACK
Q6010
STBY
D6011
D6014
POWER
Q6002
Q6003
Q6004
D6031
LAMP
D6034
TEMP
Q6001
SW
RESET
STID
MOSI
STCLK
DRQ
SIRCS
5/−5
DC CONT
6/−6
4/LED 0
SOD/DMP−MOSI
OSC2
OSC1
X601
4.0MHz
D6012
R6006
D6013
R6009
D6023
R6021
D6032
R6033
REG
S6002
UP
S6016
DOWN
S6011
RIGHT
S6010
LEFT
S6005
VOL +
S6015
VOL −
S6007
INPUT
S6006
POWER
S6004
P.MUTE
S6014
A.MUTE
S6003
MENU
S6013
ENTER
S6001
PATTERN
S6012
LIGHT
S6008
RESET
3/−3
2/−2
1/−1
D6007
D6008
D6009
D6010
D6006
D6002
D6003
D6004
D6005
D6001
3/−3
2/−2
1/−1
0/−0
PA7/KL−7
PCO/KSD

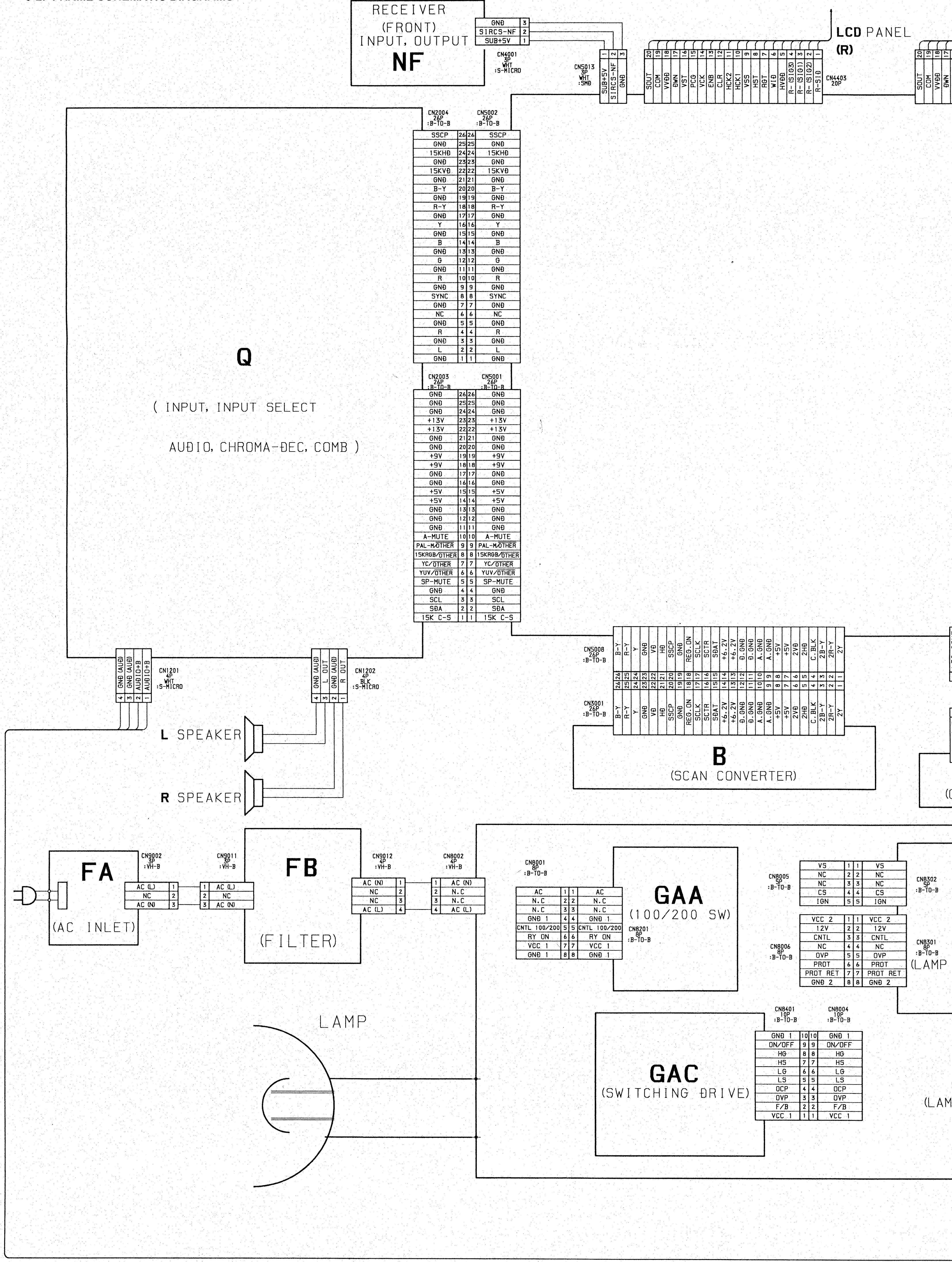

FA (AC INLET)
CN901
S9001
POWER
AC IN
F9001
CN9002
AC(N)
AC(L)

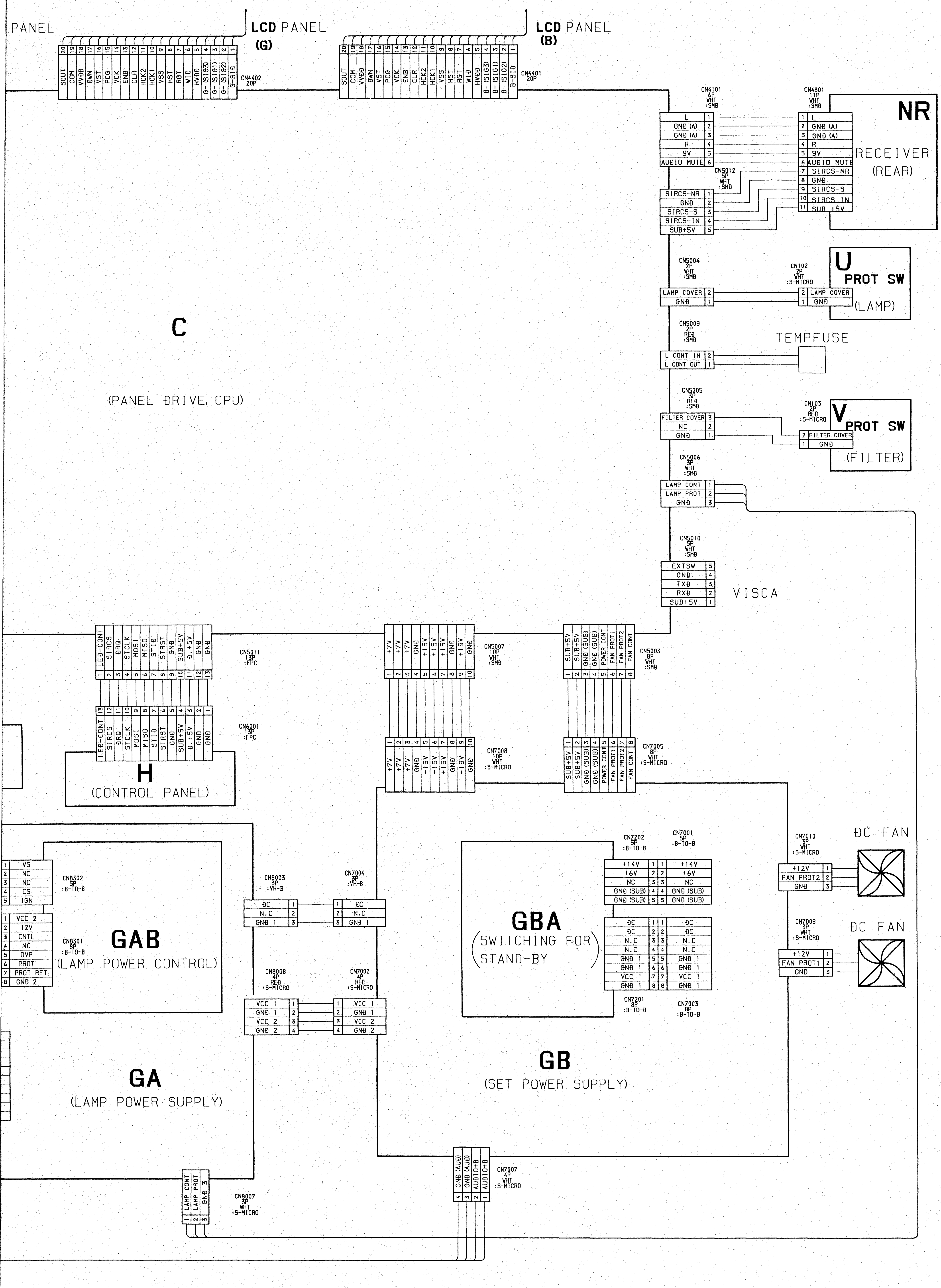

FB (FILTER)
T9011
LFT
CN9011
CN9012

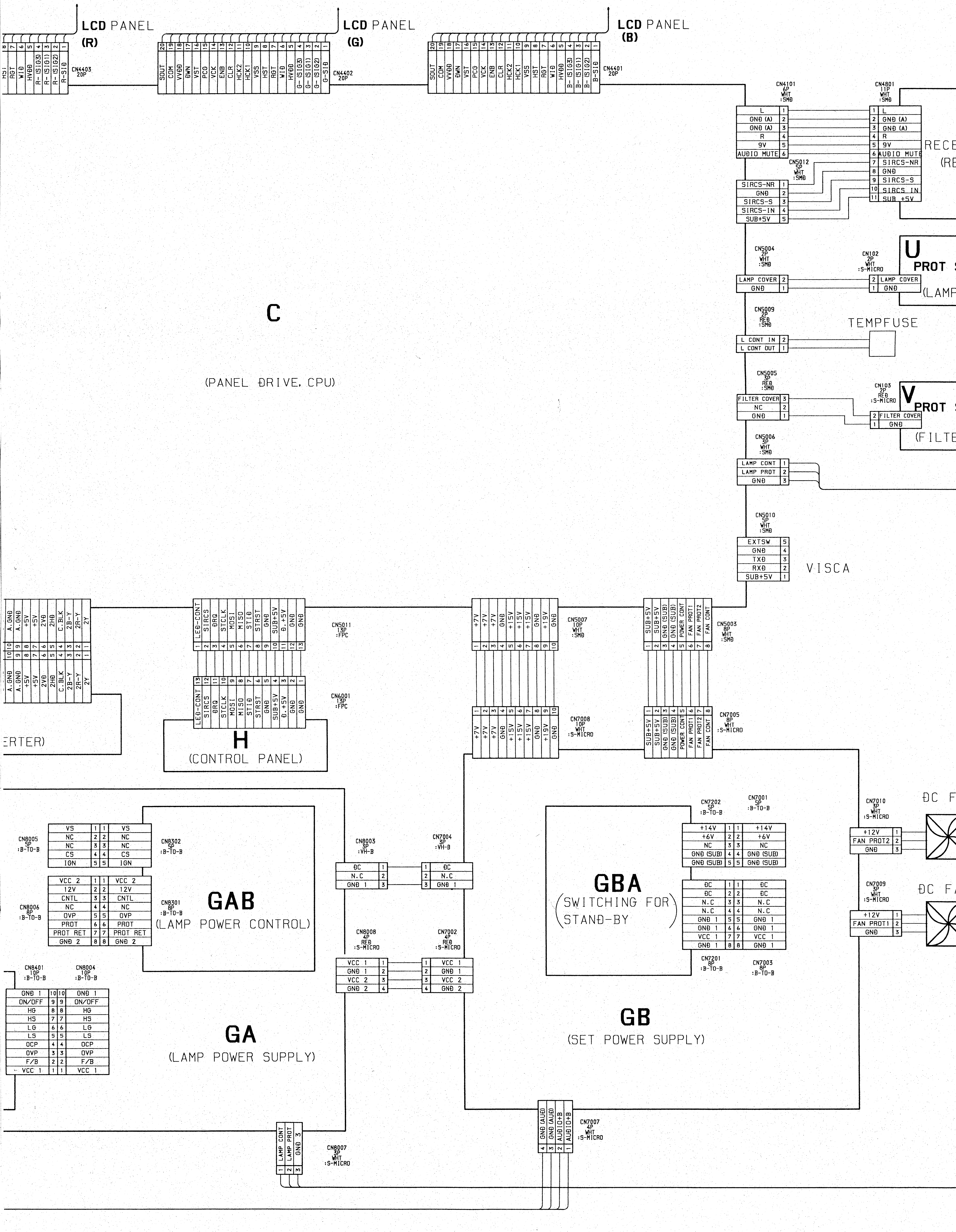

IC8201
100/200 CONTROL
Q8201
Q8202
Q8203, 8204
SW
D8201
RECT
AC
CN8201
CONT 100/200
RY ON
Vcc 1
IC8203
RY ON CONT
Q8210
Vcc
IC8202
+9V REG
GAA (100/200 SW)

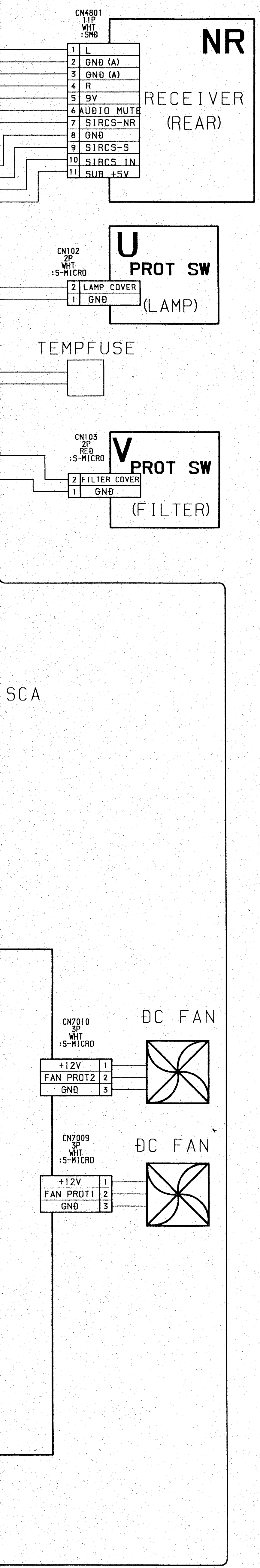

FB (FILTER)
T9011 LFT
CN9011
CN9012
CN9002
AC(N)
AC(L)
IC8201 100/200 CONTROL
D8201 RECT
CN8201
CONT 100/200
RY ON
Vcc 1
Q8210 SW
IC8202 +9V REG
GA (LAMP POWER SUPPLY)
CN8002
CN8001
CTL 100/200
RY8001 RELAY
RY8002 RELAY
C8005
C8004
Q8018 SW
D8010
Q8003,8004 SWITCHING
OCD LS LG HS HG
T8001 PIT
D8007 RECT
D8006 RECT
D8009 SW
R8026
R8025
IC8001 HV BLOCK
CN8003 DC
CN8005 VS CS IGN
PH8002 PHOTO COUPLER
Vcc2
Q8005 SW
CN8008 Vcc 1 Vcc2
Q8001 INVERTER
Q8002,8030,8031 SWITCH
CN8006 Vcc2 12V CNTL PROT PROT DET
PH8004 PHOTO COUPLER
PH8005 PHOTO COUPLER
PH8001 PHOTO COUPLER
PH8006 PHOTO COUPLER
Q8018 SW
CN8007 LAMP PORT LAMP CONT
I TO C BOARD
CN8004 Vcc 1 F/B OCD LS LG HS HG ON/OFF
GAC (SWITCHING DRIVE)
CN8401 ON/OFF HG HS LG LS OCD F/B Vcc 1
Q8401,8402 D8401,8402 SWITCHING
T8401
IC8401 SVIN ON/OFF VC CS RT I SWITCHING DRIVE OUT 1 OUT 2
GAB (LAMP POWER CONTROL)
VS CS IGN
Vcc2 12V CNTL PROT
(12V)
IC8303 REG
(REF)
IC8304 +12V REG
SW D8321, Q8308
Q8310 RESET
Q8312 TIMER
Q8303,8304 8309,8311 SW
R8338,8382
Q8306 PROT
D8324
Q8313, 8314 SW
D8323
D8302, 8303
IC8301(1/4) COMP.
D8307
IC8301(4/4) COMP.
D8301
D8320
IC8305 COMP.
IC8301(3/4) COMP.
Q8320,8321 START PROT
IC8301(2/4) COMP.
D8330
GB (SET POWER SUPPLY)
CN7004 DC
Q7001-Q7004 SWITCHING
PH7001 SWITCHING INTERFACE
T7001
IC7002 Q7005-Q7007 CONTROL
Q7008 SW
T7002 CONVERTER TRANS
D7006 RECT
D7007 RECT
D7009 RECT
D7008 RECT
D7005 RECT
CN7002 Vcc 1 Vcc2
CN7003 DC Vcc 1
CN7001 +14V +6V
IC7001 +5V REG
CN7007 AUDIO +8
C TO Q BOARD
CN7008 +7V +15V +19V
E TO C BOARD
IC7010 +12V REG
CN7010 +12V FAN PROT2
DC FAN
CN7009 +12V FAN PROT 1
DC FAN
CN7005 SUB +5V POWER CONT FAN PROT1 FAN PROT2 FAN CONT
H TO C BOARD
GBA (SWITCHING FOR STAND-BY)
CN7201 DC Vcc 1
Q7201,7202 D7201-D7204 SWITCHING
T7201
IC7201 CONTROL
D7207 +14V RECT
D7206 +6V RECT
T7202
D7205 RECT
CN7202 +14V +6V

5-2. FRAME SCHEMATIC DIAGRAMS

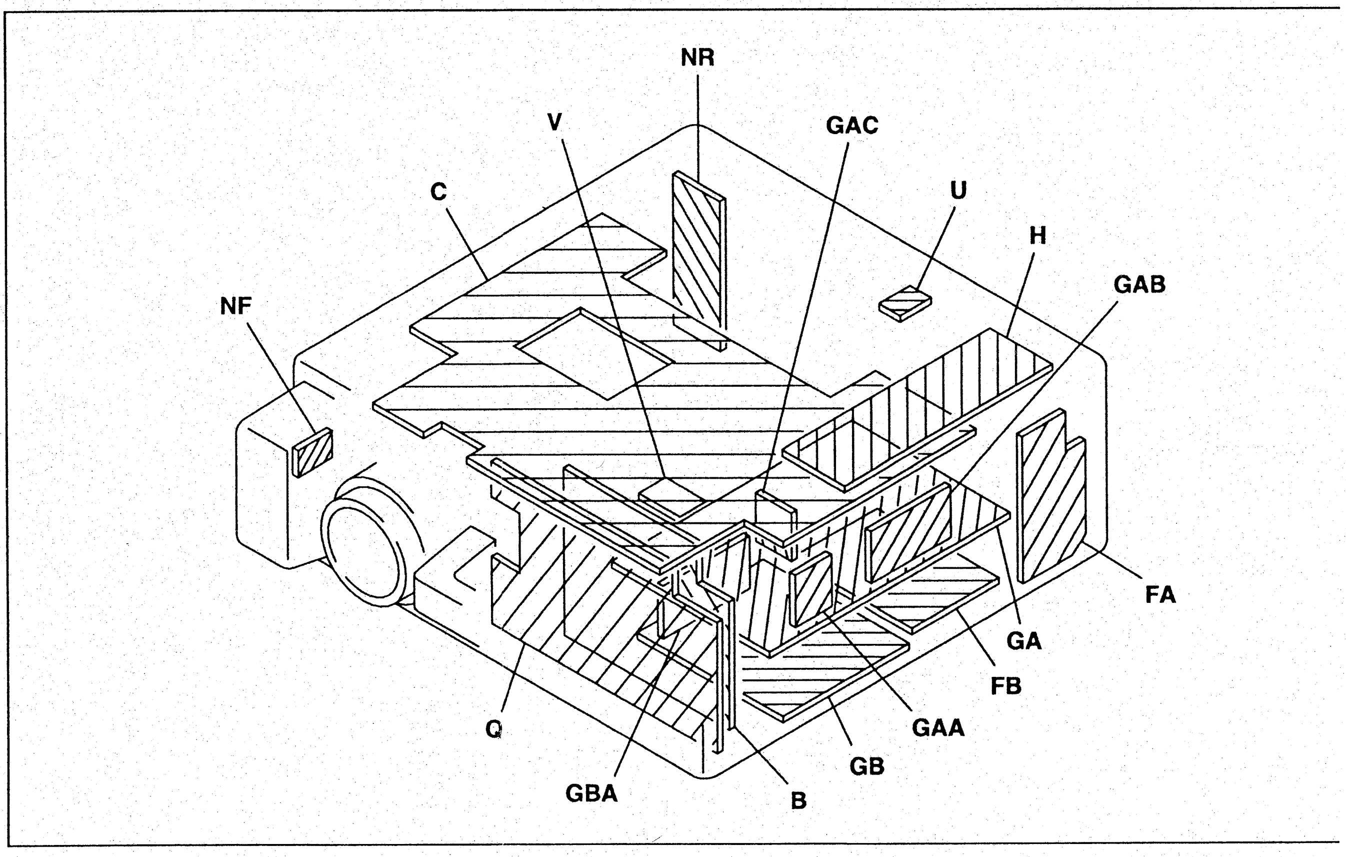

RECEIVER (FRONT) INPUT, OUTPUT
NF
GND 3
SIRCS-NF 2
SUB+5V 1
CN4001 3P WHT :S-MICRO
CN5013 3P WHT :SMD
1 SUB+5V
2 SIRCS-NF
3 GND
LCD PANEL
(R)
CN4403 20P
20 SOUT
19 COM
18 VVDD
17 DWN
16 VST
15 PCG
14 VCK
13 ENB
12 CLR
11 HCK2
10 HCK1
9 VSS
8 HST
7 RGT
6 WID
5 HVDD
4 R-(SIG3)
3 R-(SIG1)
2 R-(SIG2)
1 R-SID
20 SOUT
19 COM
18 VVDD
17 DWN
CN2004 26P :B-TO-B
CN5002 26P :B-TO-B
SSCP 26 26 SSCP
GND 25 25 GND
15KHD 24 24 15KHD
GND 23 23 GND
15KVD 22 22 15KVD
GND 21 21 GND
B-Y 20 20 B-Y
GND 19 19 GND
R-Y 18 18 R-Y
GND 17 17 GND
Y 16 16 Y
GND 15 15 GND
B 14 14 B
GND 13 13 GND
G 12 12 G
GND 11 11 GND
R 10 10 R
GND 9 9 GND
SYNC 8 8 SYNC
GND 7 7 GND
NC 6 6 NC
GND 5 5 GND
R 4 4 R
GND 3 3 GND
L 2 2 L
GND 1 1 GND
CN2003 26P :B-TO-B
CN5001 26P :B-TO-B
GND 26 26 GND
GND 25 25 GND
GND 24 24 GND
+13V 23 23 +13V
+13V 22 22 +13V
GND 21 21 GND
GND 20 20 GND
+9V 19 19 +9V
+9V 18 18 +9V
GND 17 17 GND
GND 16 16 GND
+5V 15 15 +5V
+5V 14 14 +5V
GND 13 13 GND
GND 12 12 GND
GND 11 11 GND
A-MUTE 10 10 A-MUTE
PAL-M/OTHER 9 9 PAL-M/OTHER
15KRGB/OTHER 8 8 15KRGB/OTHER
YC/OTHER 7 7 YC/OTHER
YUV/OTHER 6 6 YUV/OTHER
SP-MUTE 5 5 SP-MUTE
GND 4 4 GND
SCL 3 3 SCL
SDA 2 2 SDA
15K C-S 1 1 15K C-S
Q
(INPUT, INPUT SELECT
AUDIO, CHROMA-DEC, COMB)
CN1201 4P WHT :S-MICRO
4 GND (AUD)
3 GND (AUD)
2 AUDIO+B
1 AUDIO+B
CN1202 4P BLK :S-MICRO
4 GND (AUD)
3 L OUT
2 GND (AUD)
1 R OUT
L SPEAKER
R SPEAKER
CN5008 26P :B-TO-B
CN3001 26P :B-TO-B
26 B-Y
25 R-Y
24 Y
23 GND
22 VD
21 HD
20 SSCP
19 GND
18 REG.ON
17 SCLK
16 SCTR
15 SDAT
14 +6.2V
13 +6.2V
12 D.GND
11 D.GND
10 A.GND
9 A.GND
8 +5V
7 +5V
6 2VD
5 2HD
4 C.BLK
3 2B-Y
2 2R-Y
1 2Y
B
(SCAN CONVERTER)
FA
(AC INLET)
CN9002 3P :VH-B
AC (L) 1
NC 2
AC (N) 3
CN9011 3P :VH-B
1 AC (L)
2 NC
3 AC (N)
FB
(FILTER)
CN9012 4P :VH-B
AC (N) 1
NC 2
NC 3
AC (L) 4
CN8002 4P :VH-B
1 AC (N)
2 N.C
3 N.C
4 AC (L)
CN8001 8P :B-TO-B
CN8201 8P :B-TO-B
AC 1 1 AC
N.C 2 2 N.C
N.C 3 3 N.C
GND 1 4 4 GND 1
CNTL 100/200 5 5 CNTL 100/200
RY ON 6 6 RY ON
VCC 1 7 7 VCC 1
GND 1 8 8 GND 1
GAA
(100/200 SW)
CN8005 5P :B-TO-B
CN8302 5P :B-TO-B
VS 1 1 VS
NC 2 2 NC
NC 3 3 NC
CS 4 4 CS
IGN 5 5 IGN
CN8006 8P :B-TO-B
CN8301 8P :B-TO-B
VCC 2 1 1 VCC 2
12V 2 2 12V
CNTL 3 3 CNTL
NC 4 4 NC
OVP 5 5 OVP
PROT 6 6 PROT
PROT RET 7 7 PROT RET
GND 2 8 8 GND 2
(LAMP
CN8401 10P :B-TO-B
CN8004 10P :B-TO-B
GND 1 10 10 GND 1
ON/OFF 9 9 ON/OFF
HG 8 8 HG
HS 7 7 HS
LG 6 6 LG
LS 5 5 LS
OCP 4 4 OCP
OVP 3 3 OVP
F/B 2 2 F/B
VCC 1 1 1 VCC 1
GAC
(SWITCHING DRIVE)
LAMP
(LAM


PANEL
LCD PANEL (G)
LCD PANEL (B)
CN4402 20P
SOUT COM VVDD DWN VST PCG VCK ENB CLR HCK2 HCK1 VSS HST RGT WID HVDD G-(SIG3) G-(SIG1) G-(SIG2) G-SID
CN4401 20P
SOUT COM VVDD DWN VST PCG VCK ENB CLR HCK2 HCK1 VSS HST RGT WID HVDD B-(SIG3) B-(SIG1) B-(SIG2) B-SID
CN4101 6P WHT :SMD
L, GND (A), GND (A), R, 9V, AUDIO MUTE
CN4801 11P WHT :SMD
L, GND (A), GND (A), R, 9V, AUDIO MUTE, SIRCS-NR, GND, SIRCS-S, SIRCS IN, SUB +5V
NR
RECEIVER (REAR)
CN5012 5P WHT :SMD
SIRCS-NR, GND, SIRCS-S, SIRCS-IN, SUB+5V
CN5004 2P WHT :SMD
LAMP COVER, GND
CN102 2P WHT :S-MICRO
U
PROT SW (LAMP)
CN5009 2P RED :SMD
L CONT IN, L CONT OUT
TEMPFUSE
CN5005 3P RED :SMD
FILTER COVER, NC, GND
CN103 2P RED :S-MICRO
V
PROT SW (FILTER)
CN5006 3P WHT :SMD
LAMP CONT, LAMP PROT, GND
CN5010 5P WHT :SMD
EXTSW, GND, TXD, RXD, SUB+5V
VISCA
C
(PANEL DRIVE, CPU)
CN5011 13P :FPC
LED-CONT SIRCS DRQ STCLK MOSI MISO STID STRST GND SUB+5V D.+5V GND GND
CN6001 13P :FPC
H
(CONTROL PANEL)
CN5007 10P WHT :SMD
+7V +7V +7V GND +15V +15V +15V +19V +19V GND
CN7008 10P WHT :S-MICRO
CN5003 8P WHT :SMD
SUB+5V SUB+5V GND (SUB) GND (SUB) POWER CONT FAN PROT1 FAN PROT2 FAN CONT
CN7005 8P WHT :S-MICRO
CN8302 5P :B-TO-B
VS, NC, NC, CS, IGN
CN8301 8P :B-TO-B
VCC 2, 12V, CNTL, NC, OVP, PROT, PROT RET, GND 2
GAB
(LAMP POWER CONTROL)
CN8003 3P :VH-B
CN7004 3P :VH-B
DC, N.C, GND 1
CN8008 4P RED :S-MICRO
CN7002 4P RED :S-MICRO
VCC 1, GND 1, VCC 2, GND 2
GA
(LAMP POWER SUPPLY)
CN7202 5P :B-TO-B
CN7001 5P :B-TO-B
+14V, +6V, NC, GND (SUB), GND (SUB)
GBA
(SWITCHING FOR STAND-BY)
DC, DC, N.C, N.C, GND 1, GND 1, VCC 1, GND 1
CN7201 8P :B-TO-B
CN7003 8P :B-TO-B
GB
(SET POWER SUPPLY)
CN7010 3P WHT :S-MICRO
+12V, FAN PROT2, GND
DC FAN
CN7009 3P WHT :S-MICRO
+12V, FAN PROT1, GND
DC FAN
CN8007 3P WHT :S-MICRO
LAMP CONT, LAMP PROT, GND 3
CN7007 4P WHT :S-MICRO
GND (AUD), GND (AUD), AUDIO+B, AUDIO+B


LCD PANEL (R)
LCD PANEL (G)
LCD PANEL (B)
CN4403 20P
HST RGT WIΘ HVΘΘ R-(SIG3) R-(SIG1) R-(SIG2) R-SIΘ
CN4402 20P
SOUT COM VVΘΘ ΘWN VST PCG VCK ENB CLR HCK2 HCK1 VSS HST RGT WIΘ HVΘΘ G-(SIG3) G-(SIG1) G-(SIG2) G-SIΘ
CN4401 20P
SOUT COM VVΘΘ ΘWN VST PCG VCK ENB CLR HCK2 HCK1 VSS HST RGT WIΘ HVΘΘ B-(SIG3) B-(SIG1) B-(SIG2) B-SIΘ
CN4101 6P WHT :SMΘ
L 1, GNΘ (A) 2, GNΘ (A) 3, R 4, 9V 5, AUDIO MUTE 6
CN4801 11P WHT :SMΘ
1 L, 2 GNΘ (A), 3 GNΘ (A), 4 R, 5 9V, 6 AUDIO MUTE, 7 SIRCS-NR, 8 GNΘ, 9 SIRCS-S, 10 SIRCS IN, 11 SUB +5V
RECE
(RE
CN5012 5P WHT :SMΘ
SIRCS-NR 1, GNΘ 2, SIRCS-S 3, SIRCS-IN 4, SUB+5V 5
CN5004 2P WHT :SMΘ
LAMP COVER 2, GNΘ 1
CN102 2P WHT :S-MICRO
2 LAMP COVER, 1 GNΘ
U
PROT
(LAMP
CN5009 2P REΘ :SMΘ
L CONT IN 2, L CONT OUT 1
TEMPFUSE
C
(PANEL ΘRIVE, CPU)
CN5005 3P REΘ :SMΘ
FILTER COVER 3, NC 2, GNΘ 1
CN103 2P REΘ :S-MICRO
2 FILTER COVER, 1 GNΘ
V
PROT
(FILTE
CN5006 3P WHT :SMΘ
LAMP CONT 1, LAMP PROT 2, GNΘ 3
CN5010 5P WHT :SMΘ
EXTSW 5, GNΘ 4, TXΘ 3, RXΘ 2, SUB+5V 1
VISCA
A.GNΘ A.GNΘ +5V +5V 2VΘ 2HΘ C.BLK 2B-Y 2R-Y 2Y
ERTER)
CN5011 13P :FPC
LEΘ-CONT SIRCS ΘRQ STCLK MOSI MISO STIΘ STRST GNΘ SUB+5V Θ.+5V GNΘ GNΘ
CN6001 13P :FPC
H
(CONTROL PANEL)
CN5007 10P WHT :SMΘ
+7V +7V +7V GNΘ +15V +15V +15V GNΘ +19V GNΘ
CN7008 10P WHT :S-MICRO
CN5003 8P WHT :SMΘ
SUB+5V SUB+5V GNΘ (SUB) GNΘ (SUB) POWER CONT FAN PROT1 FAN PROT2 FAN CONT
CN7005 8P WHT :S-MICRO
CN8005 5P :B-TO-B
VS 1, NC 2, NC 3, CS 4, IGN 5
CN8302 5P :B-TO-B
CN8006 8P :B-TO-B
VCC 2 1, 12V 2, CNTL 3, NC 4, OVP 5, PROT 6, PROT RET 7, GNΘ 2 8
CN8301 8P :B-TO-B
GAB
(LAMP POWER CONTROL)
CN8003 3P :VH-B
ΘC 1, N.C 2, GNΘ 1 3
CN7004 3P :VH-B
1 ΘC, 2 N.C, 3 GNΘ 1
CN8008 4P REΘ :S-MICRO
VCC 1 1, GNΘ 1 2, VCC 2 3, GNΘ 2 4
CN7002 4P REΘ :S-MICRO
1 VCC 1, 2 GNΘ 1, 3 VCC 2, 4 GNΘ 2
CN8401 10P :B-TO-B
CN8004 10P :B-TO-B
GNΘ 1 10, ON/OFF 9, HG 8, HS 7, LG 6, LS 5, OCP 4, OVP 3, F/B 2, VCC 1 1
GA
(LAMP POWER SUPPLY)
CN8007 3P WHT :S-MICRO
LAMP CONT 1, LAMP PROT 2, GNΘ 3
CN7202 5P :B-TO-B
CN7001 5P :B-TO-B
+14V 1, +6V 2, NC 3, GNΘ (SUB) 4, GNΘ (SUB) 5
GBA
(SWITCHING FOR STAND-BY)
ΘC 1, ΘC 2, N.C 3, N.C 4, GNΘ 1 5, GNΘ 1 6, VCC 1 7, GNΘ 1 8
CN7201 8P :B-TO-B
CN7003 8P :B-TO-B
GB
(SET POWER SUPPLY)
CN7010 3P WHT :S-MICRO
+12V 1, FAN PROT2 2, GNΘ 3
ΘC F
CN7009 3P WHT :S-MICRO
+12V 1, FAN PROT1 2, GNΘ 3
ΘC FA
CN7007 4P WHT :S-MICRO
GNΘ (AUΘ) 4, GNΘ (AUΘ) 3, AUΘIO+B 2, AUΘIO+B 1


CN4801
11P
WHT
:SMD
NR
1 L
2 GND (A)
3 GND (A)
4 R
5 9V
6 AUDIO MUTE
7 SIRCS-NR
8 GND
9 SIRCS-S
10 SIRCS IN
11 SUB +5V
RECEIVER
(REAR)
CN102
2P
WHT
:S-MICRO
U
PROT SW
2 LAMP COVER
1 GND
(LAMP)
TEMPFUSE
CN103
2P
RED
:S-MICRO
V
PROT SW
2 FILTER COVER
1 GND
(FILTER)
SCA
CN7010
3P
WHT
:S-MICRO
DC FAN
+12V 1
FAN PROT2 2
GND 3
CN7009
3P
WHT
:S-MICRO
DC FAN
+12V 1
FAN PROT1 2
GND 3

5-3. CIRCUIT BOARDS LOCATION


NR
V
GAC
C
U
H
GAB
NF
FA
GA
FB
GAA
Q
GB
GBA
B

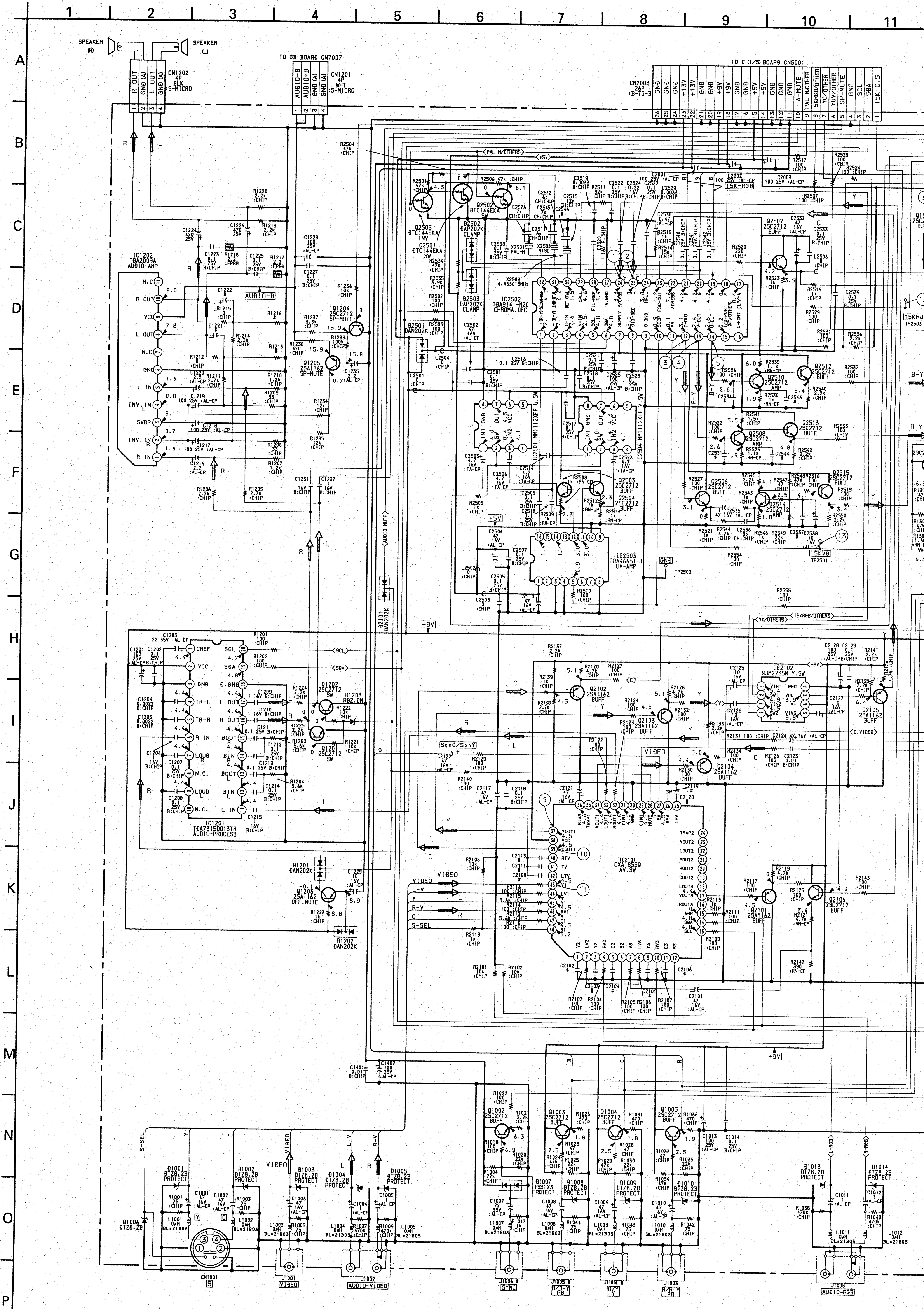
5-4. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics.
- All electrolytics are in 50V unless otherwise specified.
- All resistors are in ohms, 1/4W in resistance, 1/10W in chip resistance.
  kΩ = 1000Ω, MΩ = 1000kΩ
- ▭ : nonflammable resistor.
- ∿ : fusible resistor.
- △ : internal component.
- ☐ : panel designation and adjustment for repair.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- # marked in these schematic diagrams signifies not mounted.
- Voltage and waveform value is the reference value between it and the earth, when NTSC 3.58 color bar signal is received from color bar generator (digital multi-meter used : 10M ohms/V DC).
- Unit of voltage values is V (volt).
- * : Measurement disabled.
- ━━━ : B + line.
- ‐ ‐ ‐ : B – line.
  (Actual measured value may be different).
- Circled numbers are waveform references.
- ➡ : Signal Path.

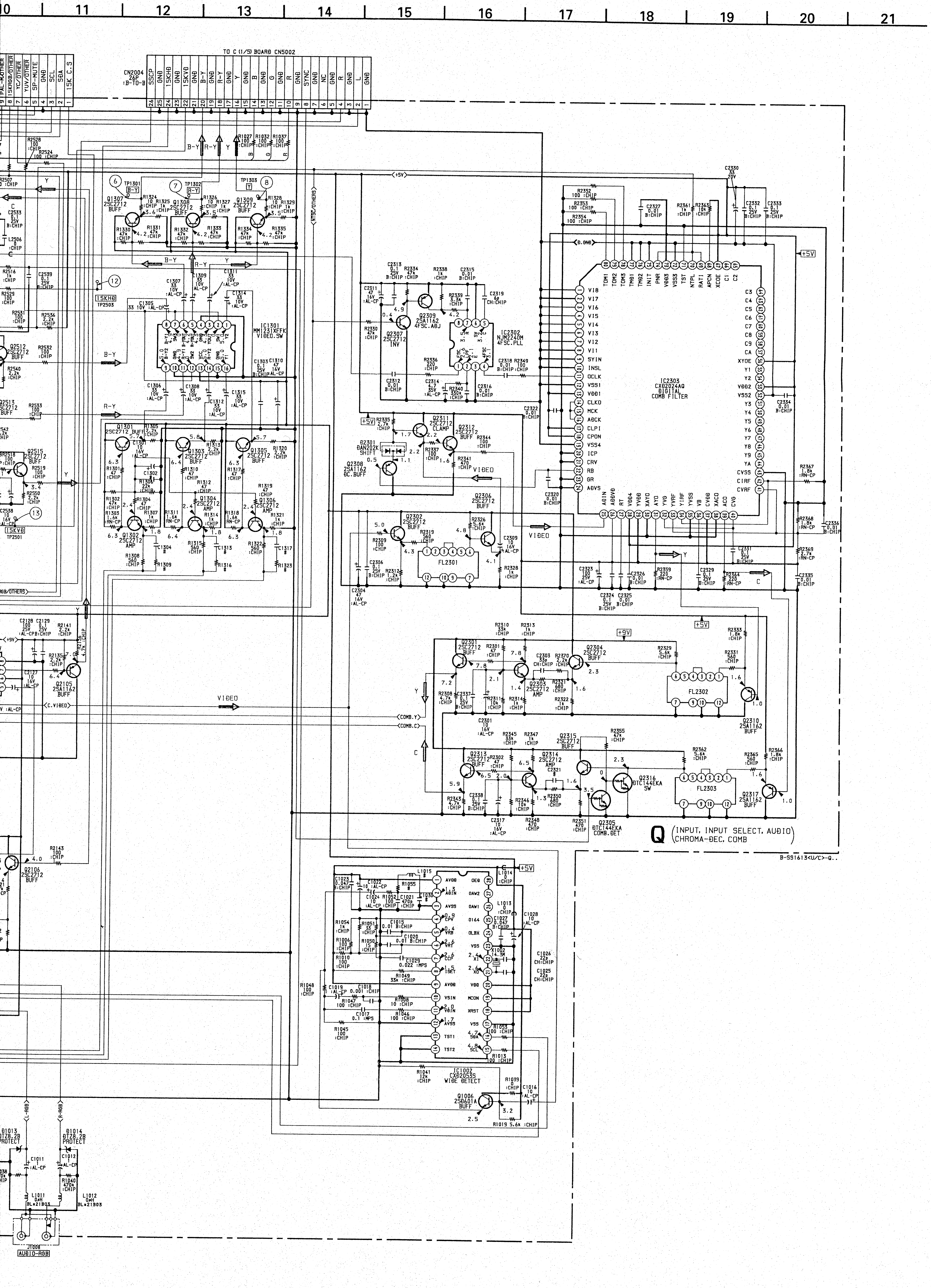
Reference information

RESISTOR	: RN	METAL FILM
	: RC	SOLID
	: FPRD	NONFRAMMABLE CARBON
	: FUSE	NONFLAMMABLE FUSIBLE
	: RS	NONFLAMMABLE METAL OXIDE
	: RB	NONFLAMMABLE CEMENT
	: RW	NONFLAMMABLE WIREWOUND
	: ※	ADJUSTMENT RESISTOR
COIL	: LF-8L	MICRO INDUCTOR
CAPACITOR	: TA	TANTALUM
	: PS	STYROL
	: PP	POLYPROPYLENE
	: PT	MYLAR
	: MPS	METALIZED POLYESTER
	: MPP	METALIZED POLYPROPYLENE
	: ALB	BIPOLAR
	: ALT	HIGH TEMPERATURE
	: ALR	HIGH RIPPLE


SPEAKER (R)
SPEAKER (L)
TO GB BOARD CN7007
CN1202 4P BLK S-MICRO
CN1201 4P WHT S-MICRO
TO C (1/5) BOARD CN5001
CN2003 26P B-TO-B
IC1202 TDA2009A AUDIO-AMP
IC2502 TDA9141-N2C CHROMA.DEC
IC2501 MM1112XFF U.SW
IC2504 MM1112XFF V.SW
IC2503 TDA4665T-T UV-AMP
IC1201 TDA7315D013TR AUDIO-PROCESS
IC2101 CXA1855Q AV.SW
IC2102 NJM2235M Y.SW
Q1204 2SC2712 SP-MUTE
Q1205 2SA1162 SP-MUTE
Q1203 2SA1162 OFF.MUTE
Q2102 2SA1162 BUFF
Q2103 2SA1162 BUFF
Q2104 2SA1162 BUFF
Q2105 2SA1162 BUFF
Q2106 2SC2712 BUFF
Q2101 2SA1162 BUFF
Q1001 2SC2712 BUFF
Q1003 2SC2712 BUFF
Q1004 2SC2712 BUFF
Q1005 2SC2712 BUFF
CN1001 S
J1001 VIDEO
J1002 AUDIO-VIDEO
J1006 SYNC
J1005 B/B-Y PB
J1004 G/Y
J1003 R/R-Y PR
J1008 AUDIO-RGB

Schematic diagram

Q board ➡


10
11
12
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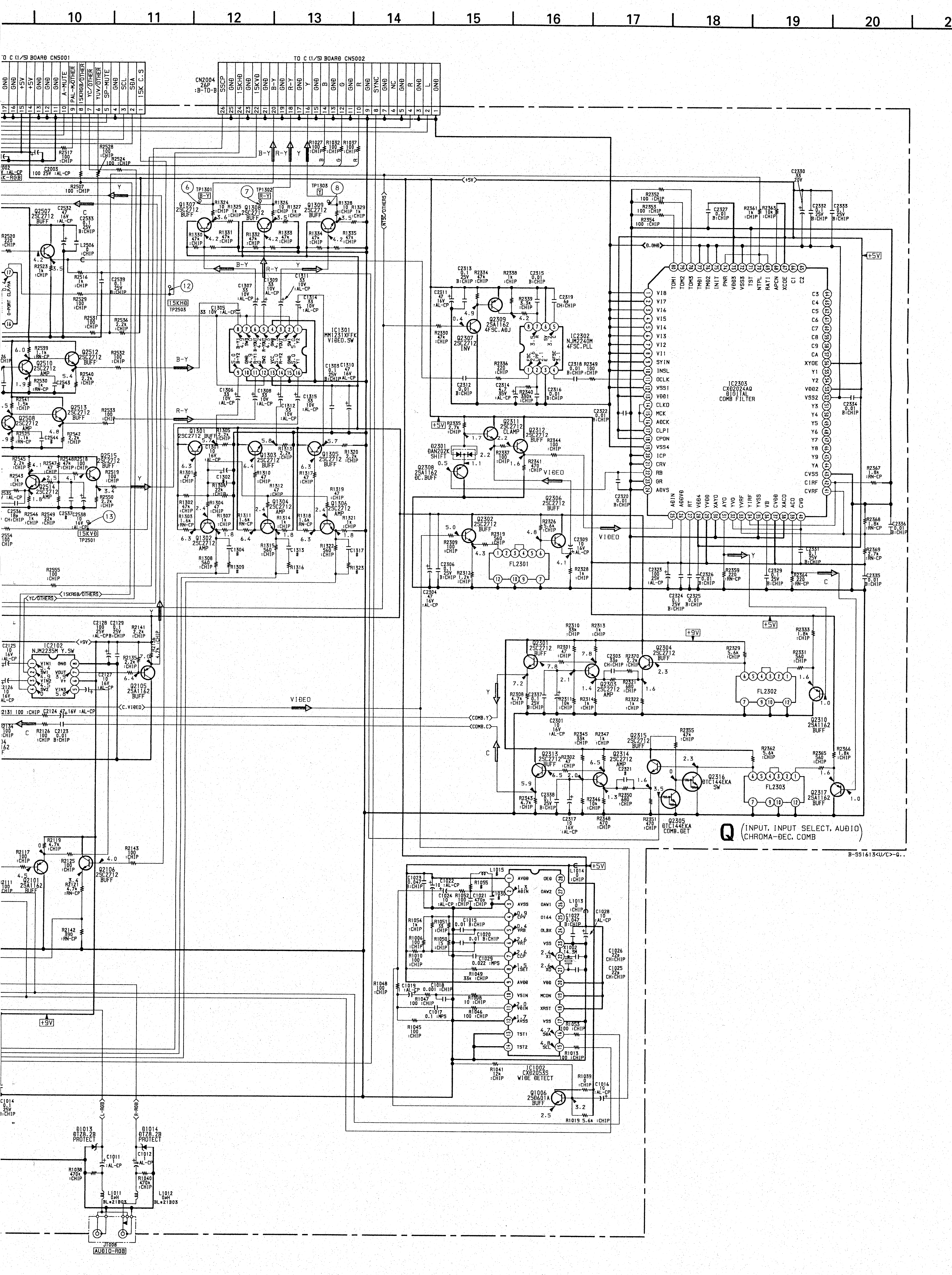
TO C (1/5) BOARD CN5002
CN2004
26P
:B-TO-B
SSCP
15KHD
15KVD
B-Y
R-Y
Y
GND
B
G
R
SYNC
NC
L
PAL-N/OTHER
15KRGB/OTHER
YC/OTHER
YUV/OTHER
SP-MUTE
SDA
SCL
15K C.S
TP1301
TP1302
TP1303
Q1307
2SC2712
BUFF
Q1308
2SC2712
BUFF
Q1309
2SC2712
BUFF
15KHD
TP2503
IC1301
MM1231XFFK
VIDEO.SW
Q1301
2SC2712 BUFF
Q1302
2SC2712
AMP
Q1303
2SC2712
BUFF
Q1304
2SC2712
AMP
Q1305
2SC2712
BUFF
Q1306
2SC2712
AMP
15KVD
TP2501
Q2512
2SC2712
BUFF
Q2513
2SC2712
BUFF
Q2515
2SC2712
BUFF
RGB/OTHERS
NTSC/OTHERS
+5V
+9V
Q2105
2SA1162
BUFF
C.VIDEO
VIDEO
Q2106
2SC2712
BUFF
D1013
DTZ8.2B
PROTECT
D1014
DTZ8.2B
PROTECT
L-RGB
R-RGB
L1011
0AH
BL±21B03
L1012
0AH
BL±21B03
JT008
AUDIO-RGB
Q2309
2SA1162
4FSC.ADJ
Q2307
2SC2712
INV
IC2302
NJM2240M
4FSC.PLL
Q2311
2SC2712
CLAMP
Q2312
2SC2712
BUFF
D2301
DAN202K
SHIFT
Q2308
2SA1162
DC.BUFF
Q2302
2SC2712
BUFF
Q2306
2SC2712
BUFF
FL2301
D.GND
IC2303
CXD2024AQ
DIGITAL
COMB FILTER
VIDEO
Y
C
Q2301
2SC2712
BUFF
Q2303
2SC2712
AMP
Q2304
2SC2712
BUFF
FL2302
Q2310
2SA1162
BUFF
COMB.Y
COMB.C
Q2313
2SC2712
BUFF
Q2314
2SC2712
AMP
Q2315
2SC2712
BUFF
Q2316
DTC144EKA
SW
Q2305
DTC144EKA
COMB.DET
FL2303
Q2317
2SA1162
BUFF
Q (INPUT, INPUT SELECT, AUDIO
CHROMA-DEC, COMB)
B-SS1613<U/C>-Q..
IC1002
CXD2053S
WIDE DETECT
Q1006
2SD601A
BUFF
R1019 5.6k :CHIP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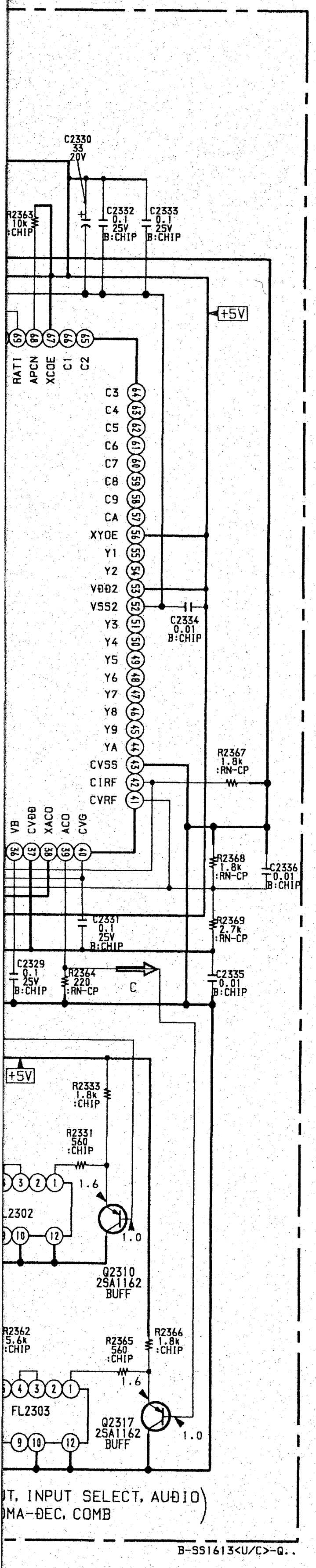
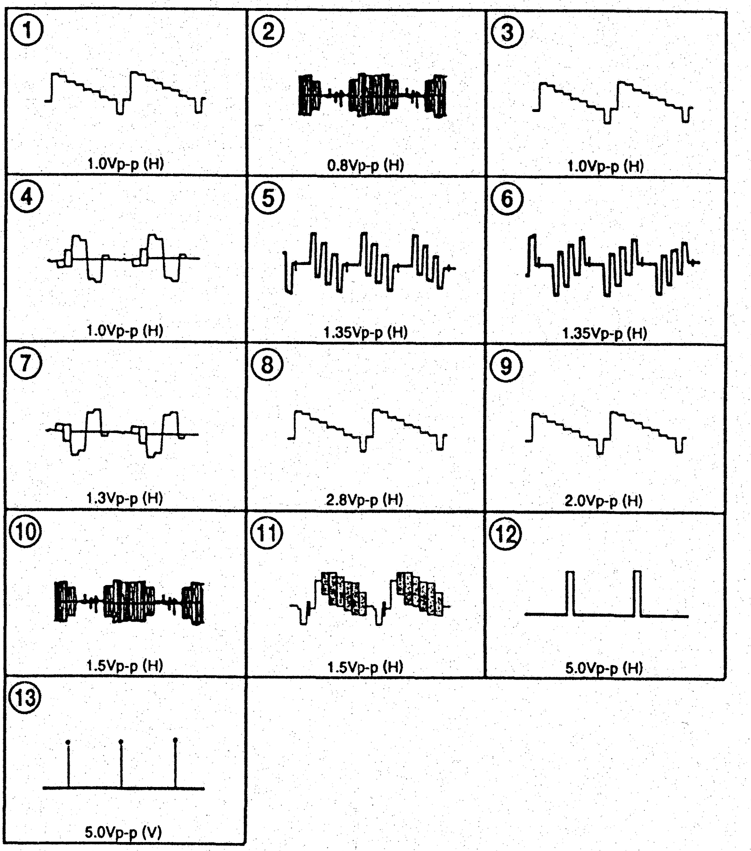
TO C (1/5) BOARD CN5001
TO C (1/5) BOARD CN5002
CN2004 26P :B-TO-B
IC1301 MM1231XFFK VIDEO.SW
IC2302 NJM2240M 4FSC.PLL
IC2303 CXD2024AQ DIGITAL COMB FILTER
IC2102 NJM2235M Y.SW
IC1002 CXD2053S WIDE DETECT
FL2301
FL2302
FL2303
Q2307 2SC2712 INV
Q2309 2SA1162 4FSC.ADJ
Q2311 2SC2712 CLAMP
Q2312 2SC2712 BUFF
Q2308 2SA1162 DC.BUFF
D2301 DAN202K SHIFT
Q2302 2SC2712 BUFF
Q2306 2SC2712 BUFF
Q2301 2SC2712 BUFF
Q2303 2SC2712 AMP
Q2304 2SC2712 BUFF
Q2310 2SA1162 BUFF
Q2313 2SC2712 BUFF
Q2314 2SC2712 AMP
Q2315 2SC2712 BUFF
Q2316 DTC144EKA SW
Q2317 2SA1162 BUFF
Q2305 DTC144EKA COMB.DET
Q1301 2SC2712 BUFF
Q1302 2SC2712 AMP
Q1303 2SC2712 BUFF
Q1304 2SC2712 AMP
Q1305 2SC2712 BUFF
Q1306 2SC2712 AMP
Q1307 2SC2712 BUFF
Q1308 2SC2712 BUFF
Q1309 2SC2712 BUFF
Q2507 2SC2712 BUFF
Q2508 2SC2712 AMP
Q2510 2SC2712 AMP
Q2512 2SC2712 BUFF
Q2513 2SC2712 BUFF
Q2514 2SC2712 AMP
Q2515 2SC2712 BUFF
Q2105 2SA1162 BUFF
Q2101 2SA1162 BUFF
Q2106 2SC2712 BUFF
Q1006 2SD601A BUFF
D1013 DTZ8.2B PROTECT
D1014 DTZ8.2B PROTECT
L1011 0AH BL=21B03
L1012 0AH BL=21B03
J1008 AUDIO-RGB
TP1301
TP1302
TP1303
TP2501
TP2503
15KHD
15KVD
B-Y
R-Y
Y
VIDEO
C
COMB.Y
COMB.C
C.VIDEO
YC/OTHERS
15KRGB/OTHERS
NTSC/OTHERS
D.GND
+5V
+9V
L-RGB
R-RGB

Q (INPUT, INPUT SELECT, AUDIO) (CHROMA-DEC, COMB)

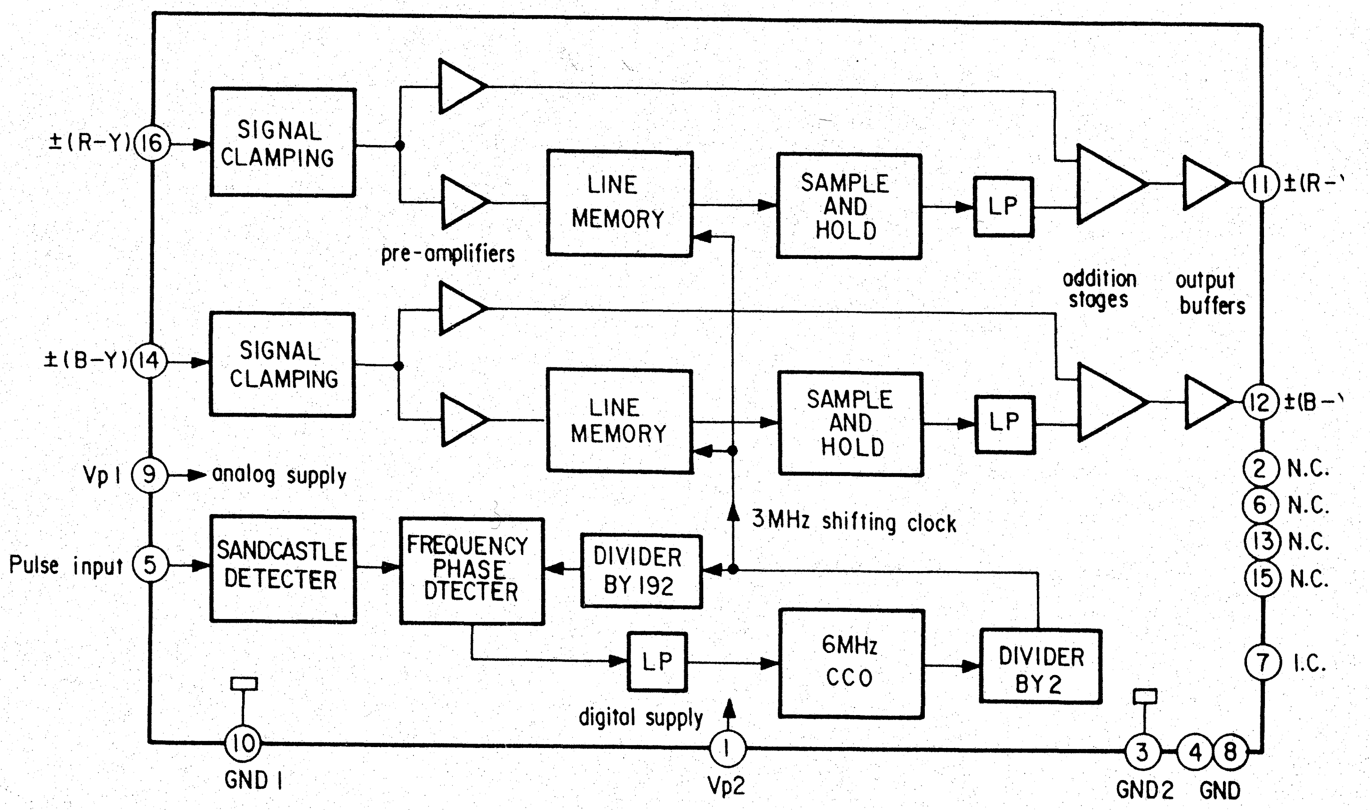
B-SS1613<U/C>-Q..


C2330
33
20V
R2363
10k
:CHIP
C2332
0.1
25V
B:CHIP
C2333
0.1
25V
B:CHIP
+5V
RAT1
APCN
XCOE
C1
C2
C3
C4
C5
C6
C7
C8
C9
CA
XYOE
Y1
Y2
VDD2
VSS2
C2334
0.01
B:CHIP
Y3
Y4
Y5
Y6
Y7
Y8
Y9
YA
CVSS
CIRF
CVRF
R2367
1.8k
:RN-CP
VB
CVDD
XACO
ACO
CVG
R2368
1.8k
:RN-CP
C2336
0.01
B:CHIP
C2331
0.1
25V
B:CHIP
R2369
2.7k
:RN-CP
C2329
0.1
25V
B:CHIP
R2364
220
:RN-CP
C
C2335
0.01
B:CHIP
+5V
R2333
1.8k
:CHIP
R2331
560
:CHIP
1.6
L2302
1.0
Q2310
2SA1162
BUFF
R2362
5.6k
:CHIP
R2365
560
:CHIP
R2366
1.8k
:CHIP
1.6
FL2303
Q2317
2SA1162
BUFF
1.0
T. INPUT SELECT. AUDIO
MA-DEC. COMB
B-S51613<U/C>-Q..

Q BOARD



Q BOARD IC2503 TDA4665T


±(R-Y) ⑯
SIGNAL CLAMPING
LINE MEMORY
SAMPLE AND HOLD
LP
⑪ ±(R-
pre-amplifiers
addition stages
output buffers
±(B-Y) ⑭
SIGNAL CLAMPING
LINE MEMORY
SAMPLE AND HOLD
LP
⑫ ±(B-
Vp1 ⑨
analog supply
3MHz shifting clock
② N.C.
⑥ N.C.
⑬ N.C.
⑮ N.C.
Pulse input ⑤
SANDCASTLE DETECTER
FREQUENCY PHASE DTECTER
DIVIDER BY 192
LP
6MHz CCO
DIVIDER BY 2
⑦ I.C.
digital supply
⑩
GND1
①
Vp2
③ ④ ⑧
GND2
GND

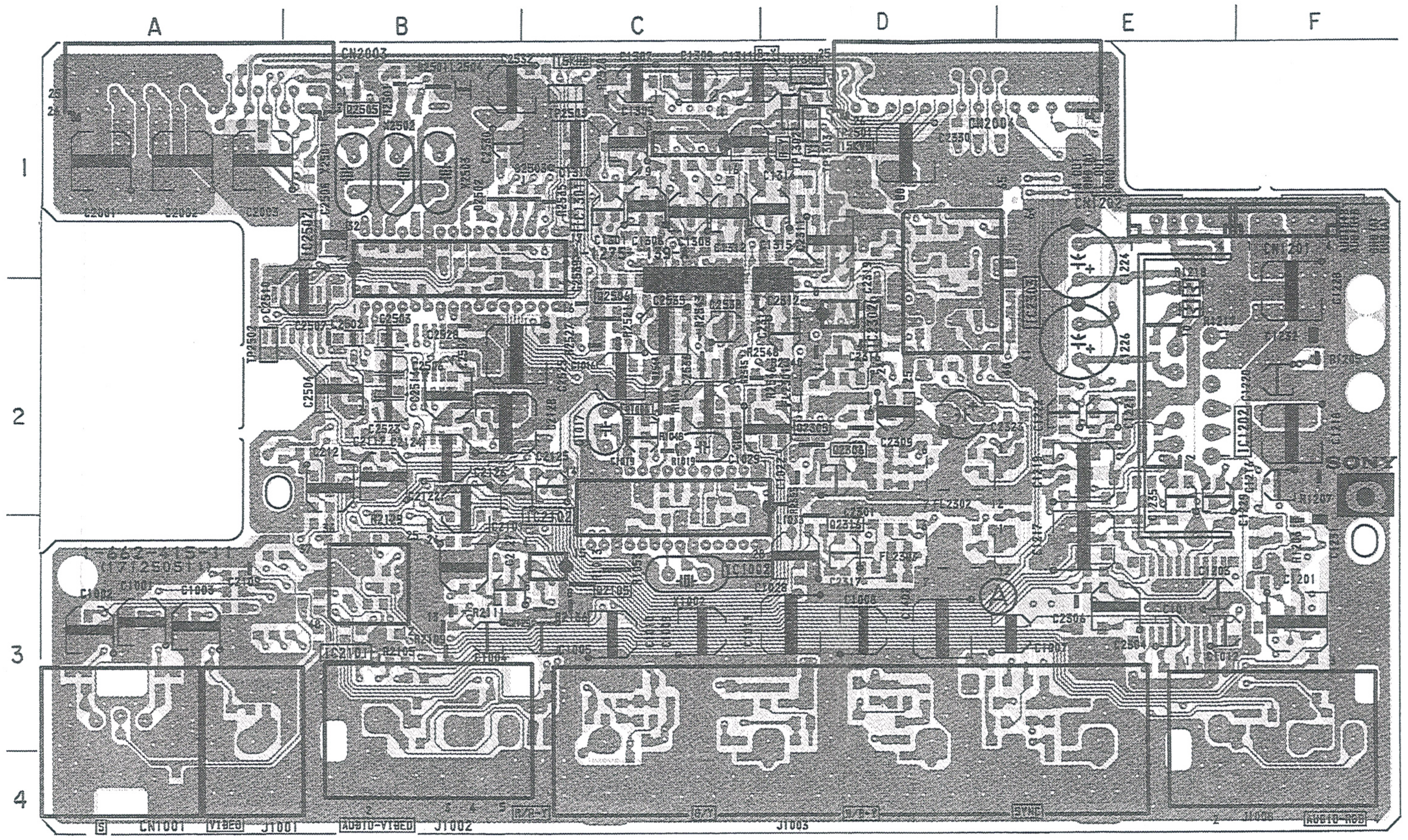
Q [INPUT, INPUT SELECT, AUDIO, CHROMA-DEC, COMB]

(US/Canadian Model)

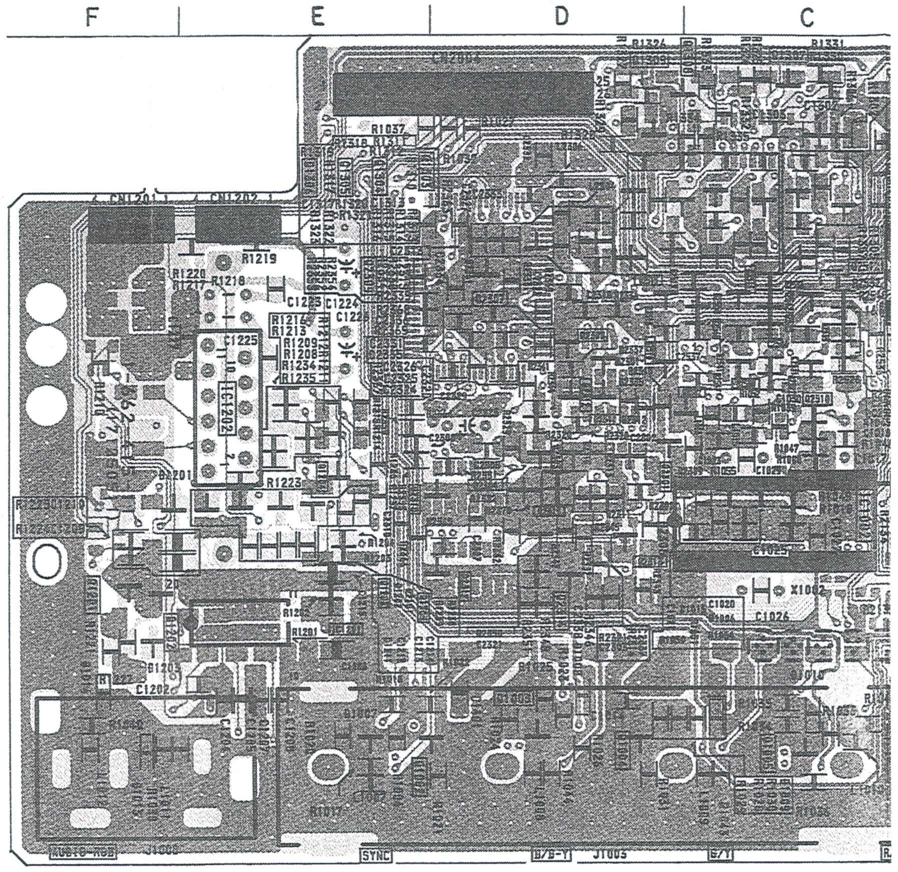
– Q BOARD – <Component Side>

Q BOARD (COMPONENT SIDE)

IC	
IC1002	C-2
IC1202	E-2
IC1301	C-1
IC2101	B-3
IC2102	C-3
IC2302	D-2
IC2303	D-2
IC2502	B-1
TRANSISTOR	
Q1006	C-2
Q2105	C-3
Q2305	D-2
Q2306	D-2
Q2316	D-3
Q2505	B-1
Q2506	C-2
DIODE	
D2501	B-1
D2502	B-1
D2503	C-1


A
B
C
D
E
F
1
2
3
4
CN1001
VIDEO
J1001
AUDIO-VIDEO
J1002
J1003
SYNC
AUDIO-RGB

<Conductor Side>

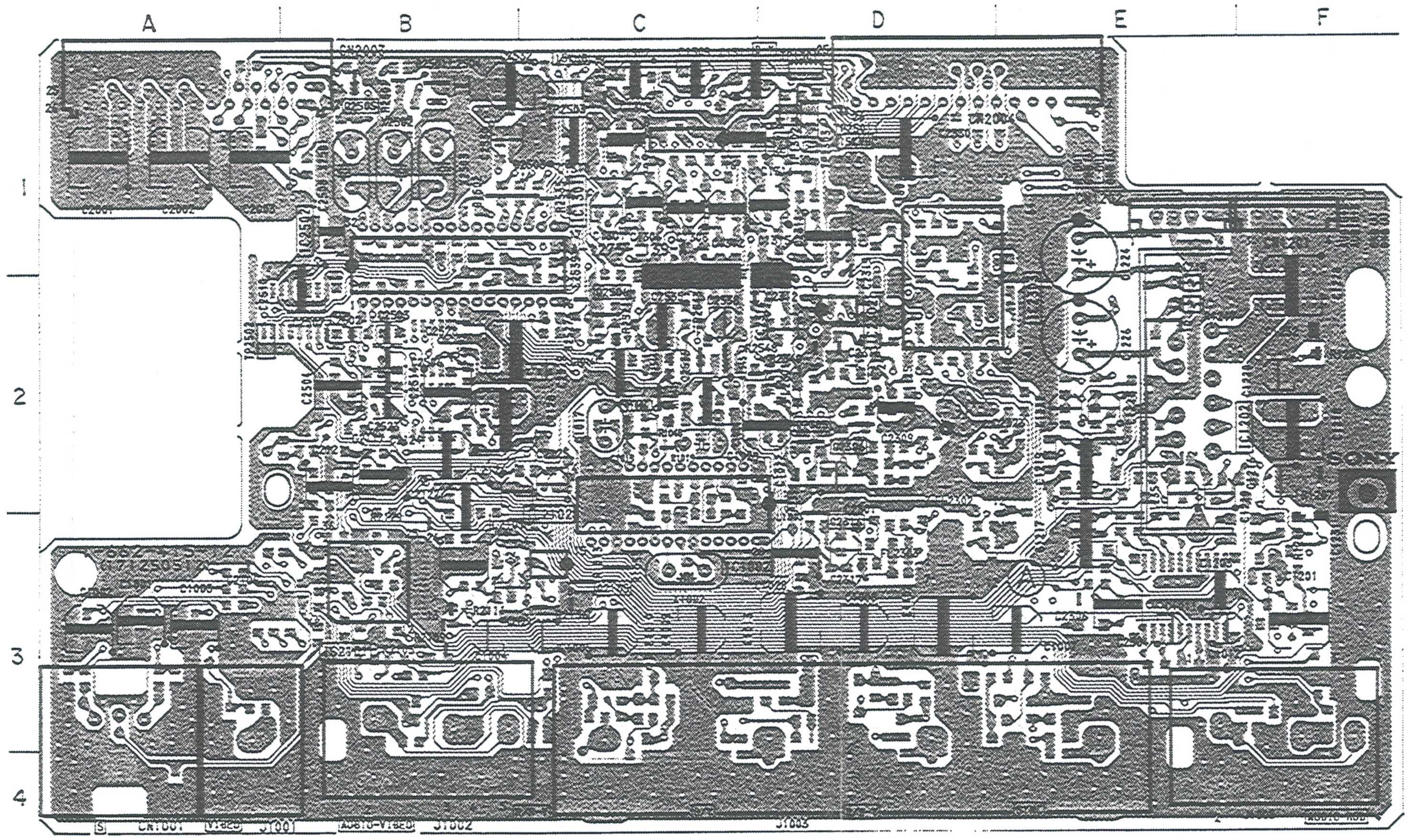

F
E
D
C
AUDIO-RGB
SYNC
J1003

(AEP Model)

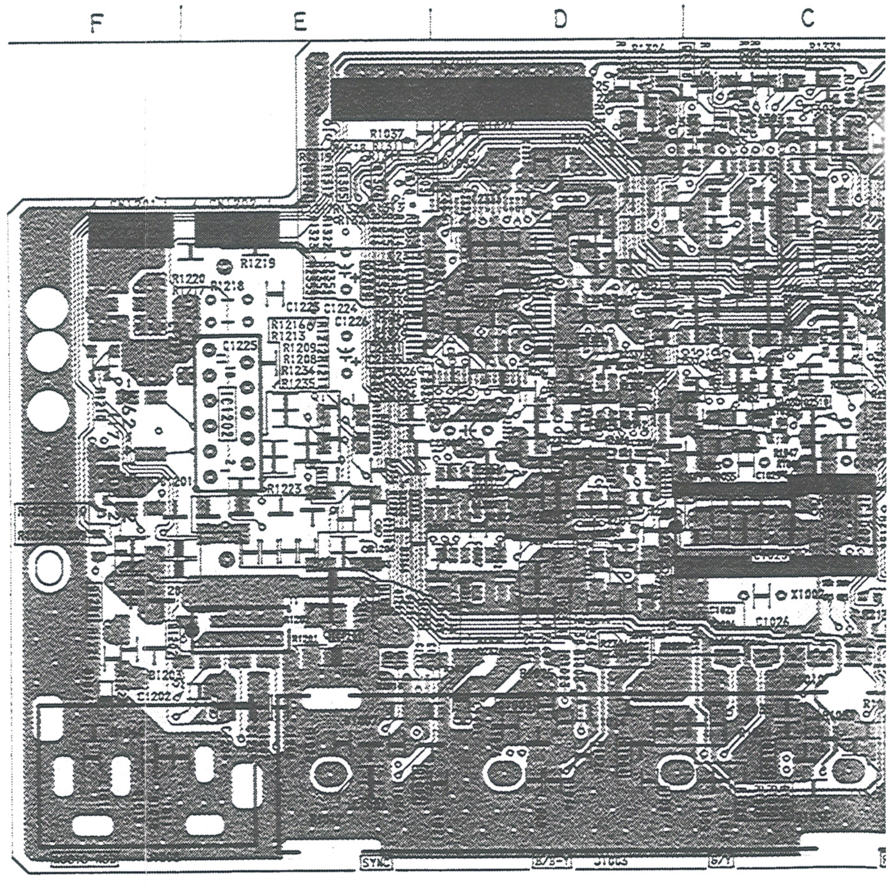
– Q BOARD – <Component Side>

Q BOARD (COMPONENT SIDE)

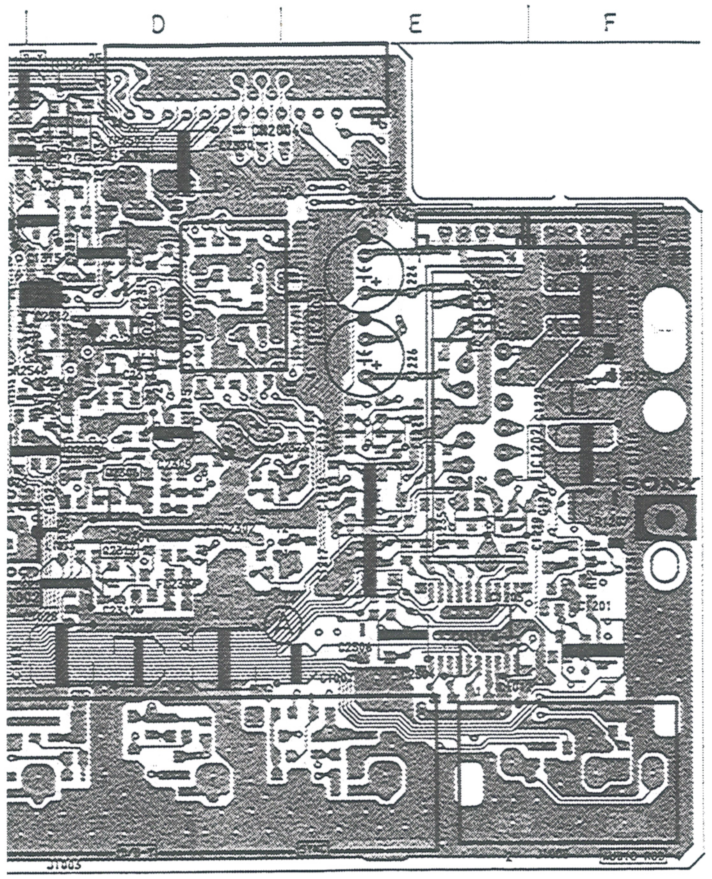
IC	
IC1002	C-2
IC1202	E-2
IC1301	C-1
IC2101	B-3
IC2102	C-3
IC2302	D-2
IC2303	D-2
IC2502	B-1
TRANSISTOR	
Q1006	C-2
Q2105	C-3
Q2305	D-2
Q2306	D-2
Q2316	D-3
Q2505	B-1
Q2506	C-2
DIODE	
D2501	B-1
D2502	B-1
D2503	C-1


A
B
C
D
E
F
1
2
3
4
J1002
J1003

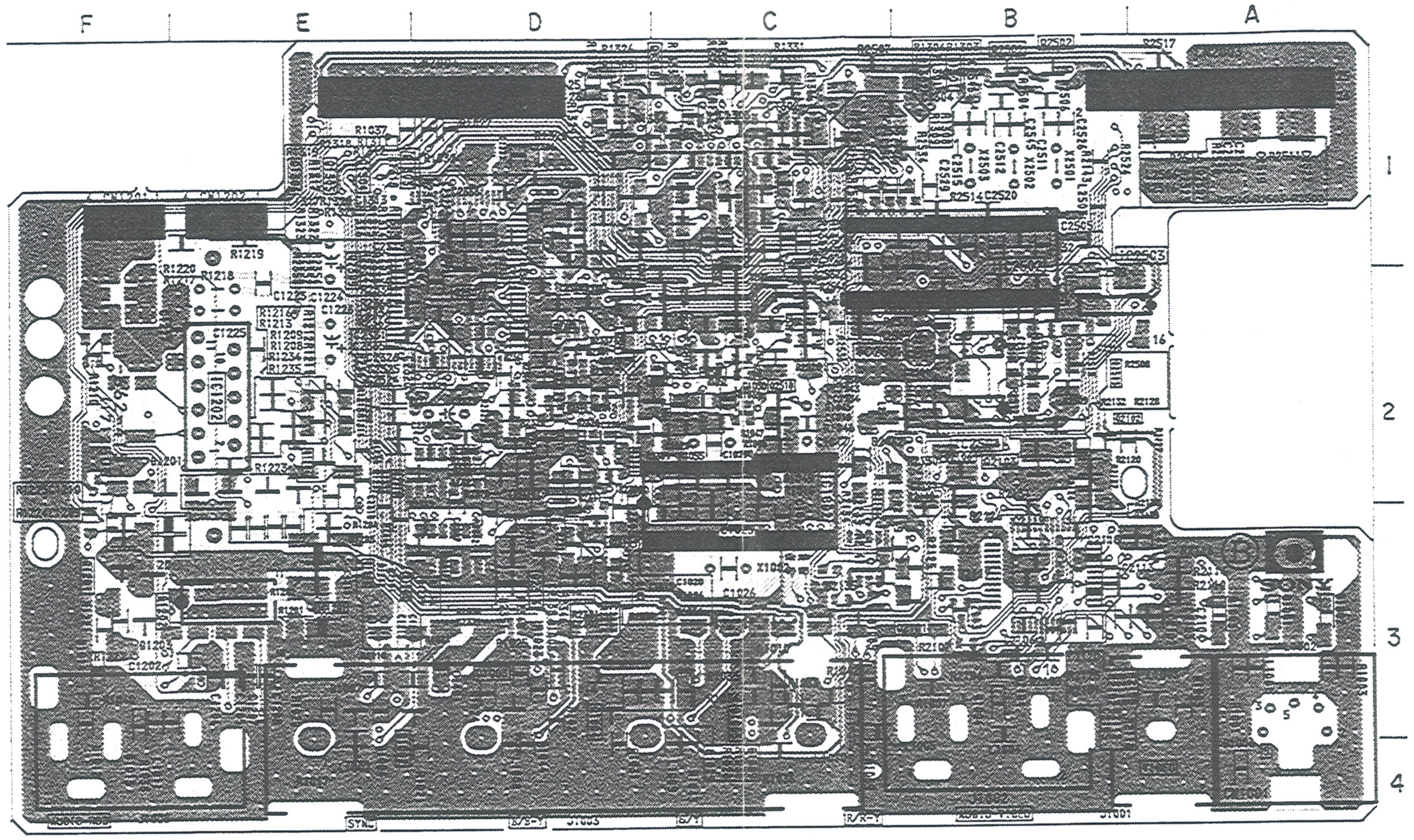
<Conductor Side>


F
E
D
C
SYNC
J1003

SELECT, AUDIO, CHROMA-DEC, COMB]



<Conductor Side>



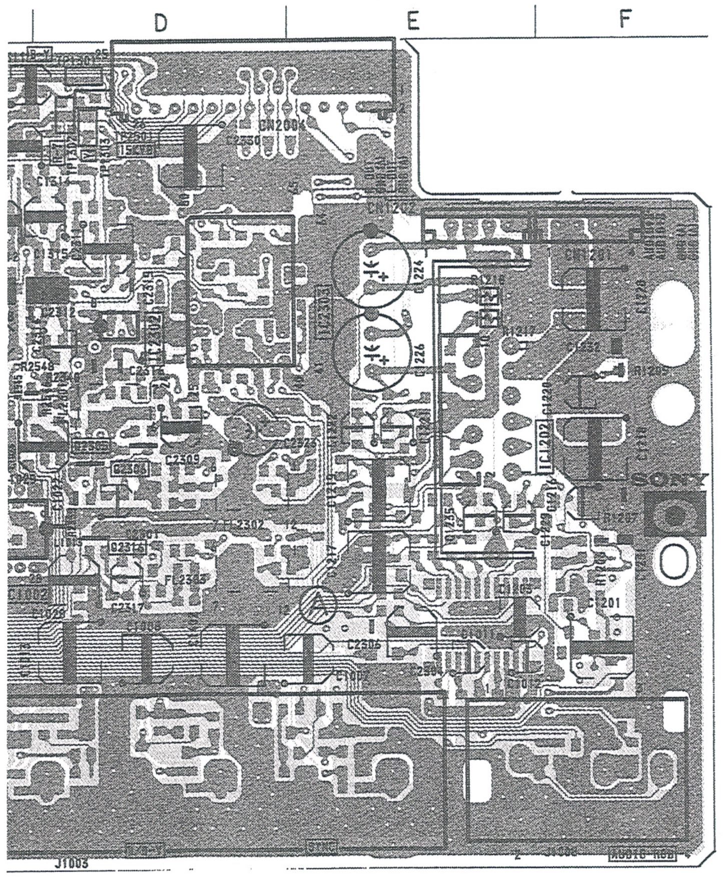
Q BOARD (CONDUCTOR SIDE)

IC	
IC1002	C-2
IC1201	E-3
IC1202	E-2
IC2501	B-2
IC2502	B-1
IC2503	B-2
IC2504	B-2

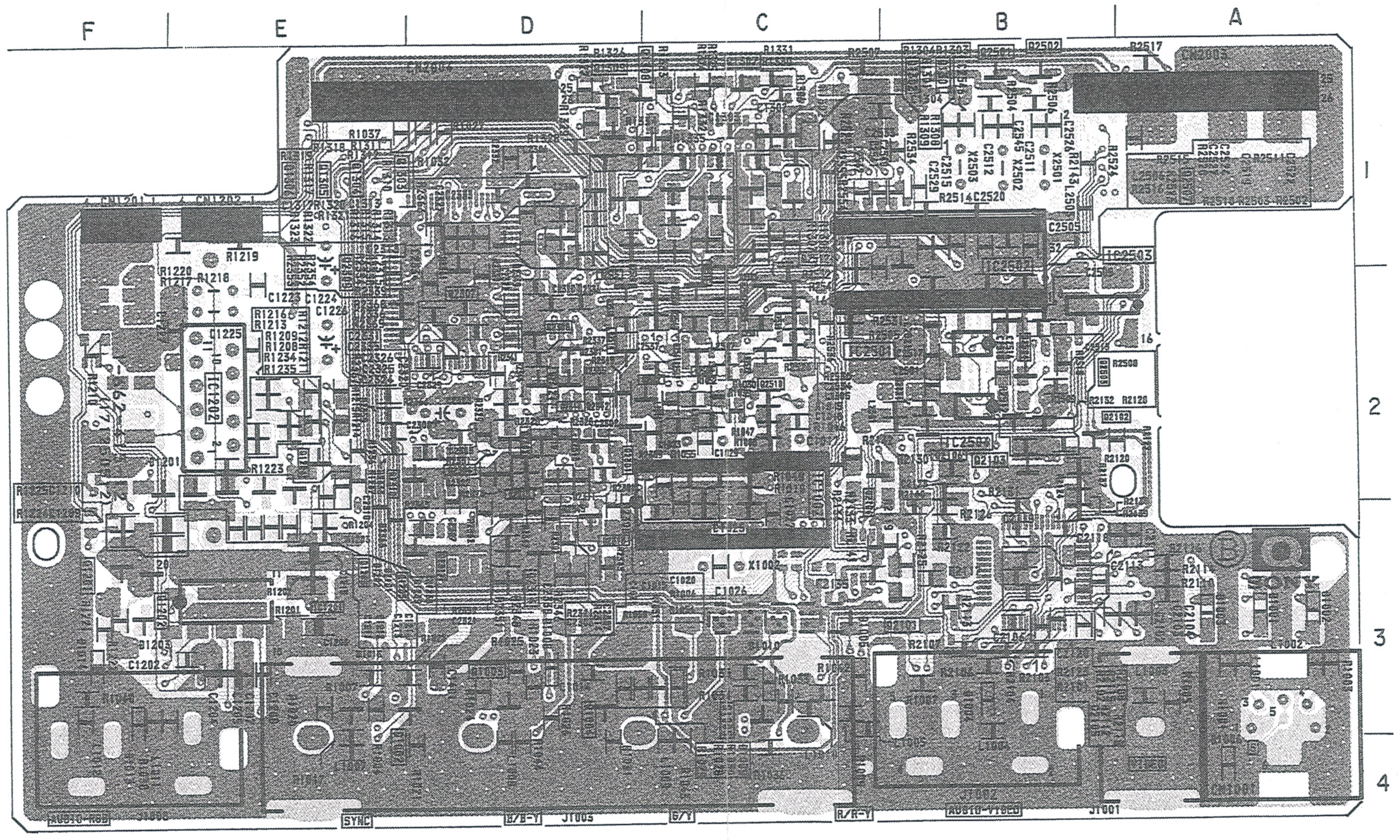
TRANSISTOR	
Q1002	E-3
Q1003	D-3
Q1004	D-3
Q1005	C-3
Q1201	F-3
Q1202	F-3
Q1203	E-2
Q1204	E-2
Q1205	E-2
Q1301	C-1
Q1302	C-1
Q1303	C-1
Q1304	C-1
Q1305	D-1
Q1306	D-1
Q1307	C-1
Q1308	D-1
Q1309	D-1
Q2101	B-3
Q2102	B-2
Q2103	B-2
Q2104	C-2
Q2106	B-2
Q2301	D-2
Q2302	D-2
Q2303	D-2
Q2304	D-2
Q2307	D-1
Q2308	D-2
Q2309	D-1
Q2310	E-2
Q2311	D-2
Q2312	D-2
Q2313	D-3
Q2314	D-3
Q2315	D-3
Q2317	D-3
Q2501	B-1
Q2502	B-1
Q2503	B-2
Q2504	B-2
Q2507	B-1
Q2508	C-2
Q2510	C-2
Q2512	C-2
Q2513	C-2
Q2514	D-2
Q2515	D-2

DIODE	
D1001	A-3
D1002	A-3
D1003	A-3
D1004	B-3
D1005	C-3
D1006	A-4
D1007	E-3
D1008	D-3
D1009	C-3
D1010	C-3
D1013	F-3
D1014	F-3
D1201	F-3
D1202	E-2
D1203	F-3
D2101	E-3
D2301	D-2

- ░ : Pattern from the side which enables seeing.
- ■ : Pattern of the rear side.



<Conductor Side>



Q BOARD (CONDUCTOR SIDE)

IC	
IC1002	C-2
IC1201	E-3
IC1202	E-2
IC2501	B-2
IC2502	B-1
IC2503	B-2
IC2504	B-2

TRANSISTOR	
Q1002	E-3
Q1003	D-3
Q1004	D-3
Q1005	C-3
Q1201	F-3
Q1202	F-3
Q1203	E-2
Q1204	E-2
Q1205	E-2
Q1301	C-1
Q1302	C-1
Q1303	C-1
Q1304	C-1
Q1305	D-1
Q1306	D-1
Q1307	C-1
Q1308	D-1
Q1309	D-1
Q2101	B-3
Q2102	B-2
Q2103	B-2
Q2104	C-2
Q2106	B-2
Q2301	D-2
Q2302	D-2
Q2303	D-2
Q2304	D-2
Q2307	D-1
Q2308	D-2
Q2309	D-1
Q2310	E-2
Q2311	D-2
Q2312	D-2
Q2313	D-3
Q2314	D-3
Q2315	D-3
Q2317	D-3
Q2501	B-1
Q2502	B-1
Q2503	B-2
Q2504	B-2
Q2507	B-1
Q2508	C-2
Q2510	C-2
Q2512	C-2
Q2513	C-2
Q2514	D-2
Q2515	D-2

DIODE	
D1001	A-3
D1002	A-3
D1003	A-3
D1004	B-3
D1005	C-3
D1006	A-4
D1007	E-3
D1008	D-3
D1009	C-3
D1010	C-3
D1013	F-3
D1014	F-3
D1201	F-3
D1202	E-2
D1203	F-3
D2101	E-3
D2301	D-2

B [SCAN CONVERTER]

(US/Canadian Model)

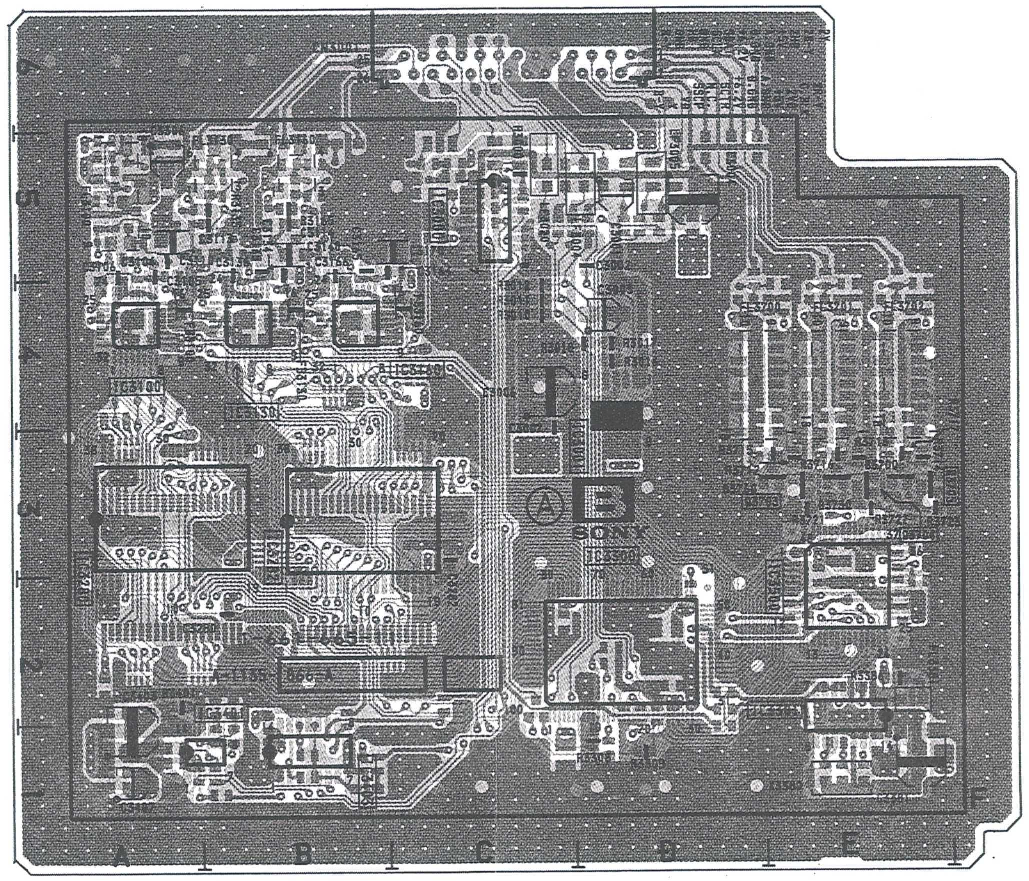
B BOARD
(COMPONENT SIDE)

IC	
IC3000	C-5
IC3001	D-4
IC3100	A-4
IC3130	B-4
IC3160	B-4
IC3280	A-3
IC3282	B-3
IC3300	D-2
IC3301	E-2
IC3401	A-1
IC3403	B-1
IC3500	E-2

TRANSISTOR	
Q3703	D-3
Q3704	E-3
Q3705	E-3

DIODE	
D3700	E-3
D3730	E-3
D3760	D-3

– B BOARD – <Component Side>



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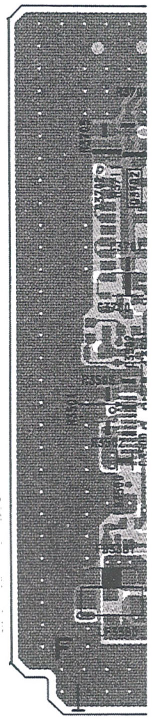


(AEP Model)

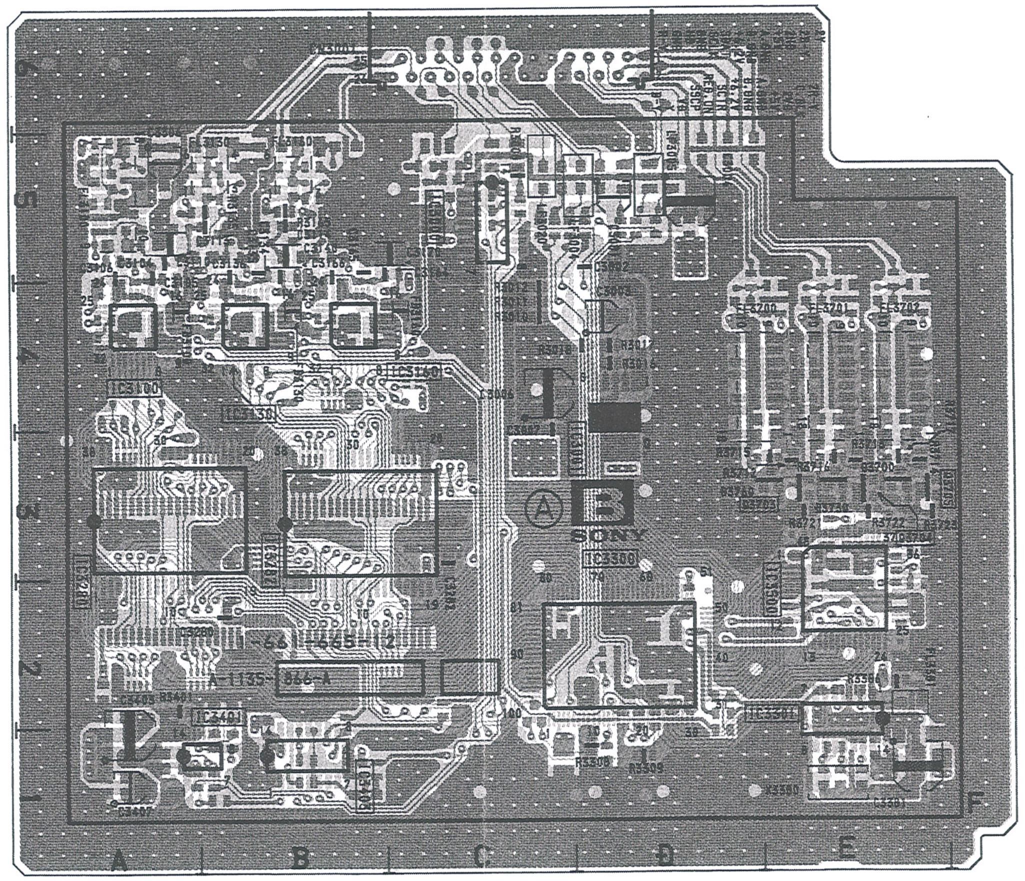
B BOARD
(COMPONENT SIDE)

IC	
IC3000	C-5
IC3001	D-4
IC3100	A-4
IC3130	B-4
IC3160	B-4
IC3280	A-3
IC3282	B-3
IC3300	D-2
IC3301	E-2
IC3401	A-1
IC3403	B-1
IC3500	E-2

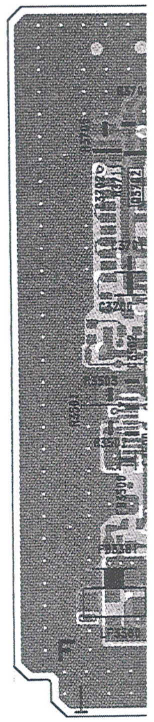
TRANSISTOR	
Q3703	D-3
Q3704	E-3
Q3705	E-3

DIODE	
D3700	E-3
D3730	E-3
D3760	D-3

– B BOARD – <Component Side>



<Conductor



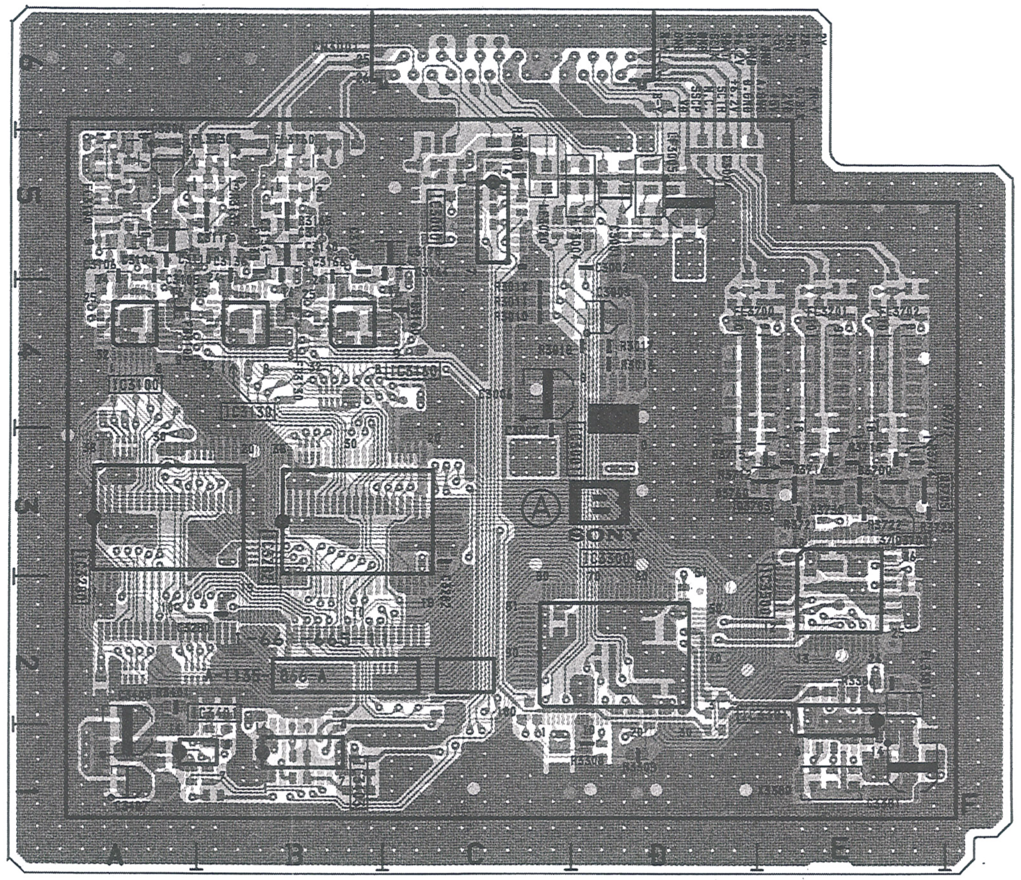
- ░ : Pattern from the side which enables seeing.
- ▓ : Pattern of the rear side.

(US/Canadian Model)

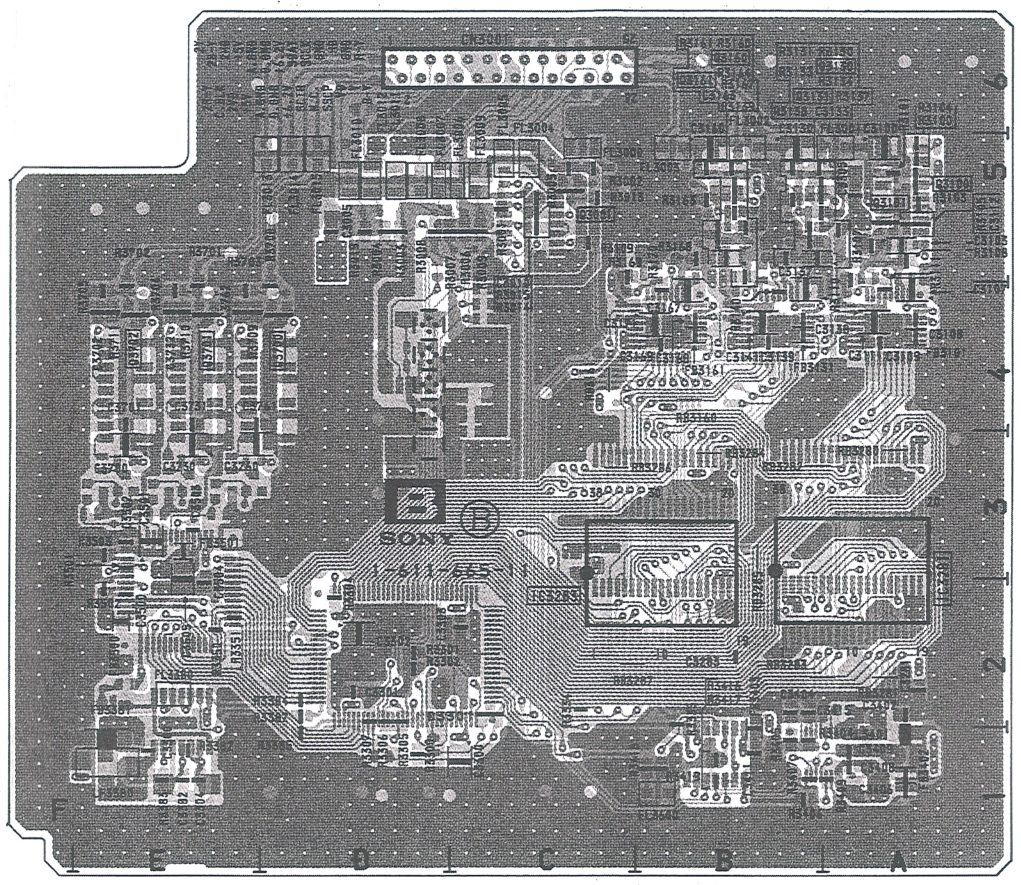
– B BOARD – <Component Side>

B BOARD (COMPONENT SIDE)

IC	
IC3000	C-5
IC3001	D-4
IC3100	A-4
IC3130	B-4
IC3160	B-4
IC3280	A-3
IC3282	B-3
IC3300	D-2
IC3301	E-2
IC3401	A-1
IC3403	B-1
IC3500	E-2
TRANSISTOR	
Q3703	D-3
Q3704	E-3
Q3705	E-3
DIODE	
D3700	E-3
D3730	E-3
D3760	D-3



<Conductor Side>



B BOARD (CONDUCTOR SIDE)

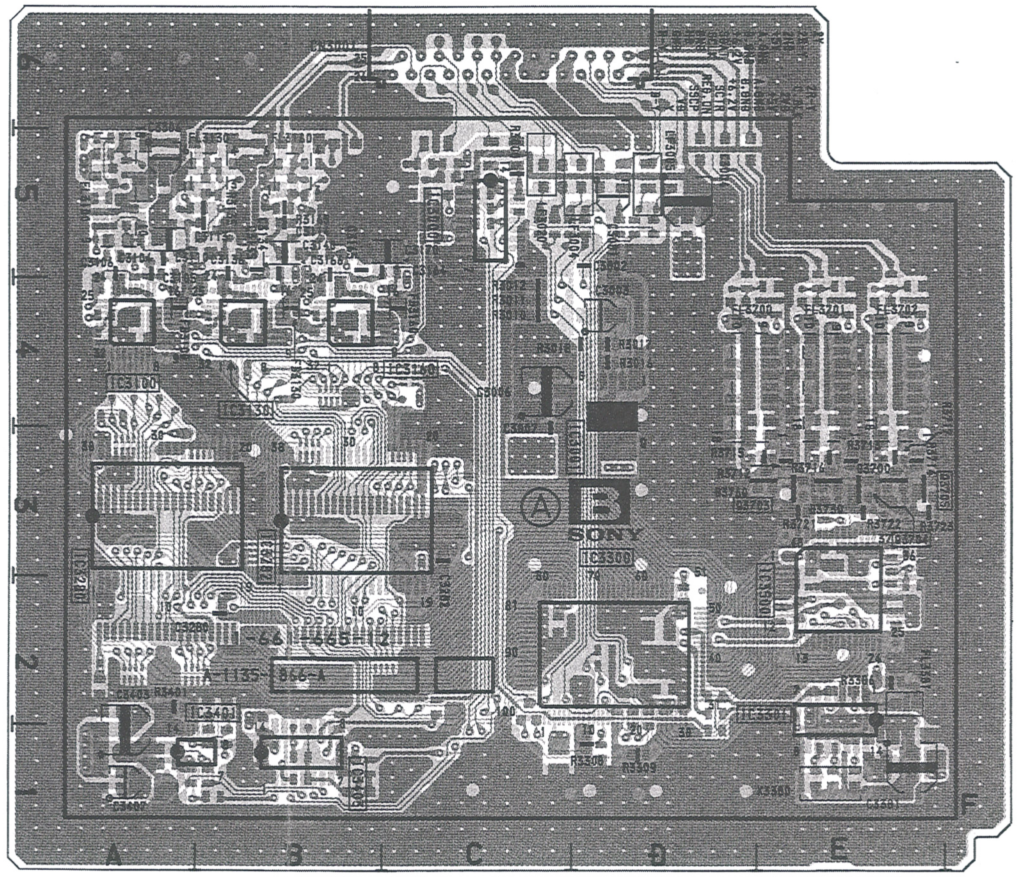
IC	
IC3281	A-2
IC3283	B-2
TRANSISTOR	
Q3001	C-5
Q3100	A-5
Q3101	A-5
Q3130	B-5
Q3131	B-5
Q3160	B-5
Q3161	B-5
Q3700	D-4
Q3701	E-4
Q3702	E-4
DIODE	
D3301	C-2

(AEP Model)

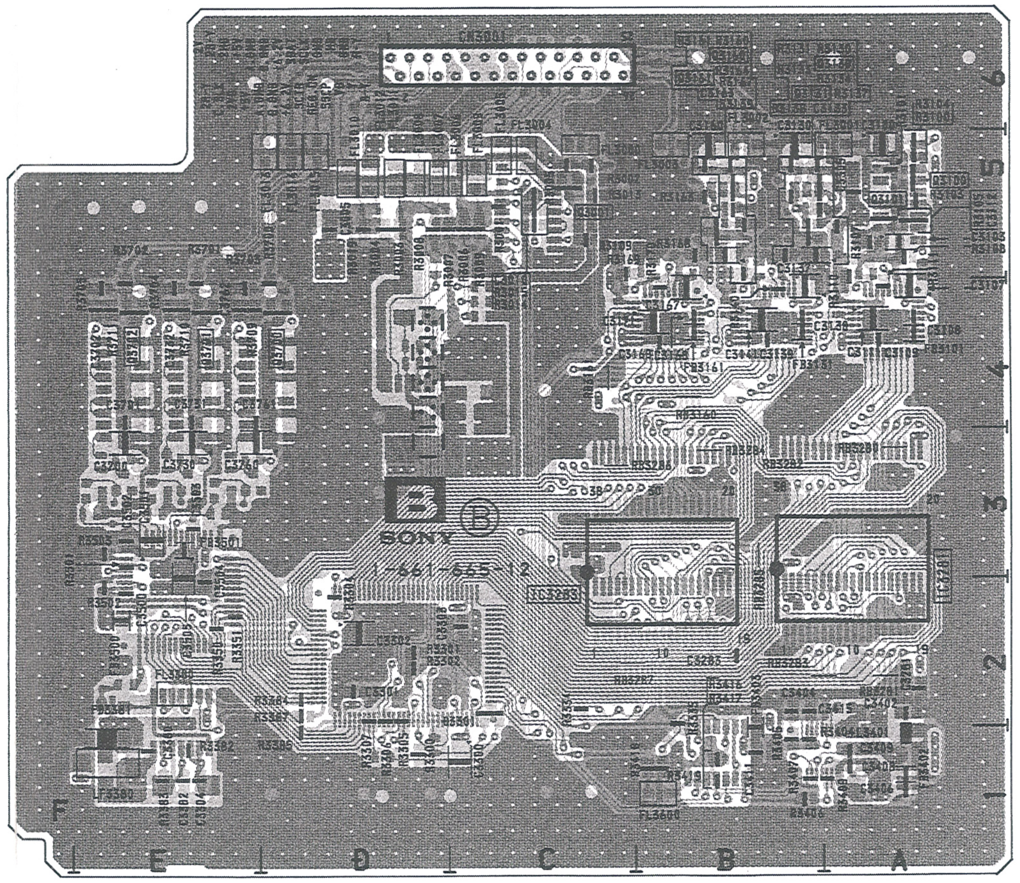
– B BOARD – <Component Side>

B BOARD (COMPONENT SIDE)

IC	
IC3000	C-5
IC3001	D-4
IC3100	A-4
IC3130	B-4
IC3160	B-4
IC3280	A-3
IC3282	B-3
IC3300	D-2
IC3301	E-2
IC3401	A-1
IC3403	B-1
IC3500	E-2
TRANSISTOR	
Q3703	D-3
Q3704	E-3
Q3705	E-3
DIODE	
D3700	E-3
D3730	E-3
D3760	D-3



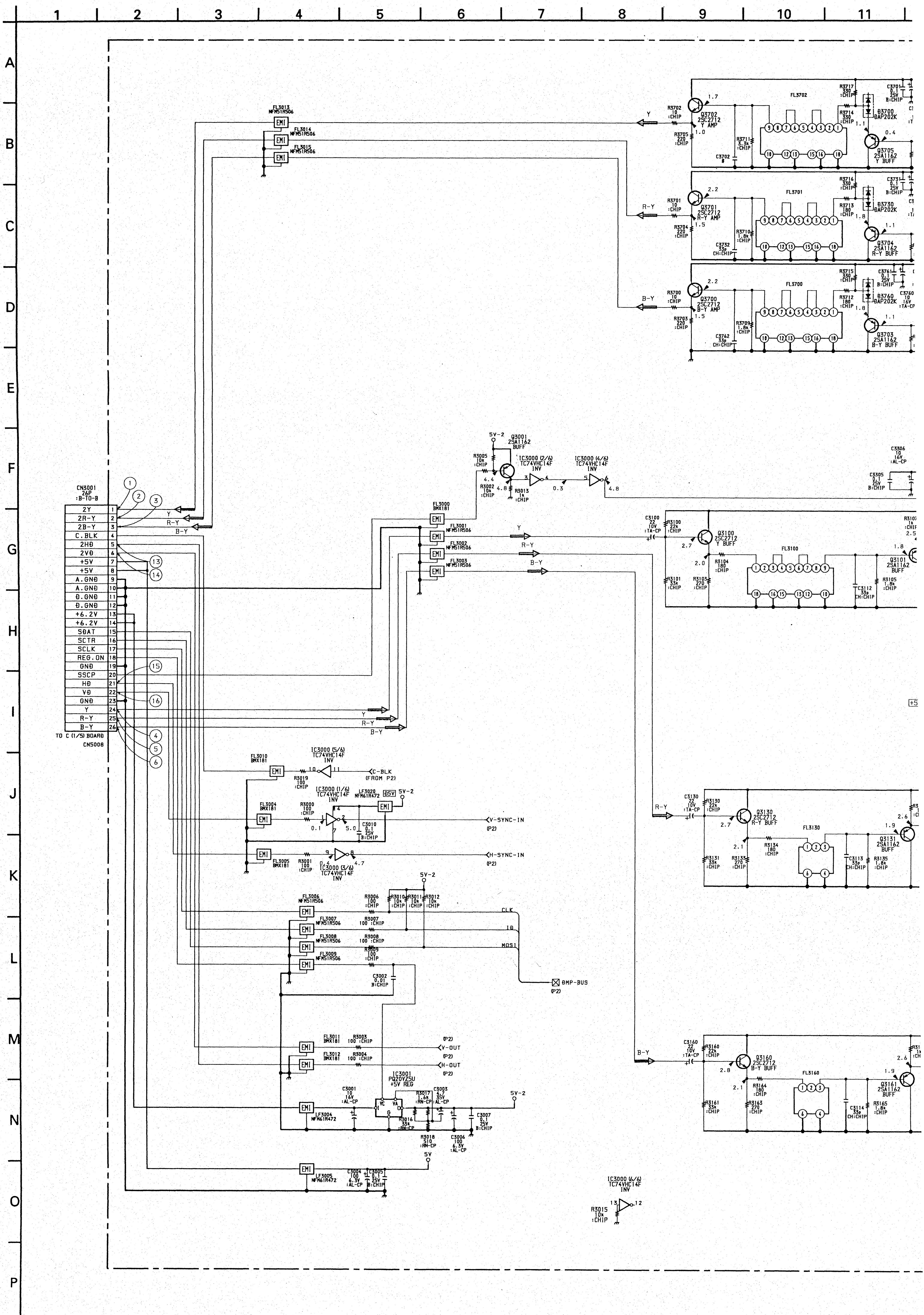
<Conductor Side>

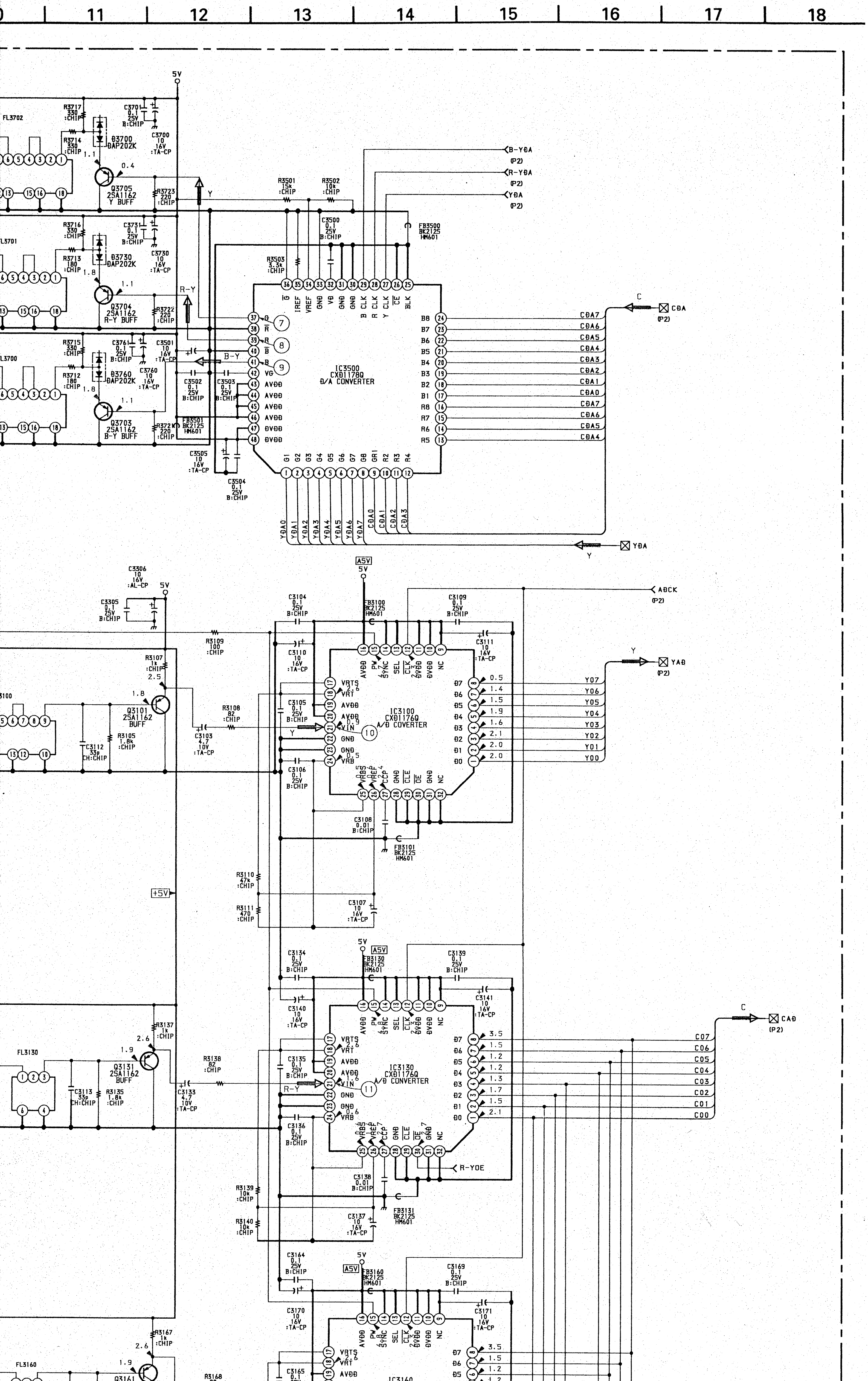


B BOARD (CONDUCTOR SIDE)

IC	
IC3281	A-2
IC3283	B-2
TRANSISTOR	
Q3001	C-5
Q3100	A-5
Q3101	A-5
Q3130	B-5
Q3131	B-5
Q3160	B-5
Q3161	B-5
Q3700	D-4
Q3701	E-4
Q3702	E-4
DIODE	
D3301	C-2

n from the side which enables seeing.
n of the rear side.


CN3001 26P :B-TO-B
2Y
2R-Y
2B-Y
C.BLK
2HD
2VD
+5V
+5V
A.GND
A.GND
D.GND
D.GND
+6.2V
+6.2V
SDAT
SCTR
SCLK
REG.ON
GND
SSCP
HD
VD
GND
Y
R-Y
B-Y
TO C (1/5) BOARD CN5008
FL3013 NFM51R506
FL3014 NFM51R506
FL3015 NFM51R506
EMI
Q3702 2SC2712 Y AMP
Q3701 2SC2712 R-Y AMP
Q3700 2SC2712 B-Y AMP
FL3702
FL3701
FL3700
Q3705 2SA1162 Y BUFF
Q3704 2SA1162 R-Y BUFF
Q3703 2SA1162 B-Y BUFF
D3700 DAP202K
D3730 DAP202K
D3760 DAP202K
5V-2
Q3001 2SA1162 BUFF
IC3000 (2/6) TC74VHC14F INV
IC3000 (4/6) TC74VHC14F INV
FL3000 BMX181
FL3001 NFM51R506
FL3002 NFM51R506
FL3003 NFM51R506
Q3100 2SC2712 Y BUFF
FL3100
Q3101 2SA1162 BUFF
FL3010 BMX181
IC3000 (5/6) TC74VHC14F INV
C-BLK (FROM P2)
FL3004 BMX181
IC3000 (1/6) TC74VHC14F INV
LF3020 NFM61R472
V-SYNC-IN (P2)
FL3005 BMX181
IC3000 (3/6) TC74VHC14F INV
H-SYNC-IN (P2)
Q3130 2SC2712 R-Y BUFF
FL3130
Q3131 2SA1162 BUFF
FL3006 NFM51R506
FL3007 NFM51R506
FL3008 NFM51R506
FL3009 NFM51R506
CLK
IB
MOSI
DMP-BUS (P2)
FL3011 BMX181
FL3012 BMX181
V-OUT (P2)
H-OUT (P2)
IC3001 PQ20VZ5U +5V REG
LF3004 NFM61R472
LF3005 NFM61R472
5V
Q3160 2SC2712 B-Y BUFF
FL3160
Q3161 2SA1162 BUFF
IC3000 (6/6) TC74VHC14F INV
R3015 10k :CHIP


11
12
13
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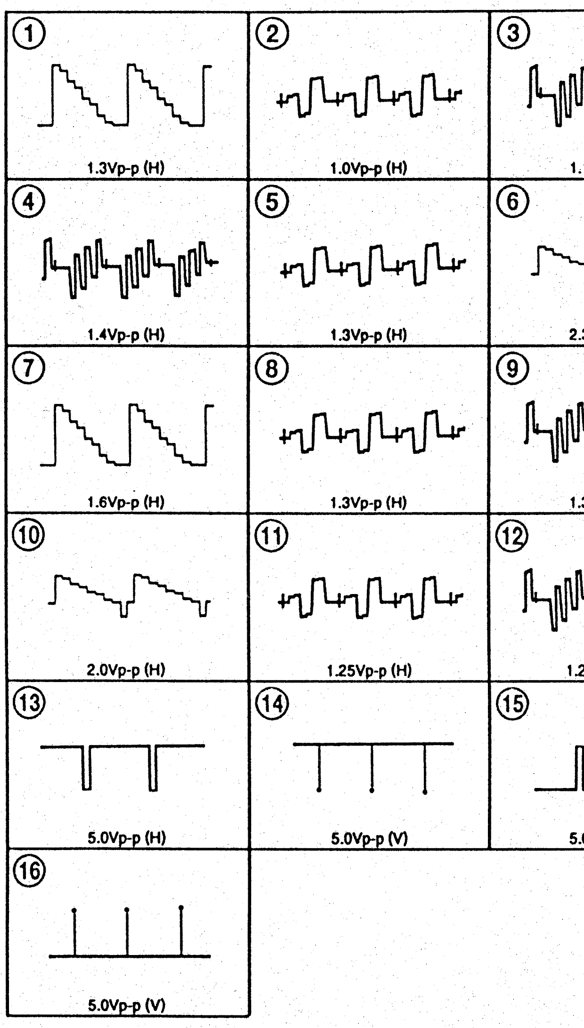
15
16
17
18
5V
FL3702
FL3701
FL3700
D3700 DAP202K
D3730 DAP202K
D3760 DAP202K
Q3705 2SA1162 Y BUFF
Q3704 2SA1162 R-Y BUFF
Q3703 2SA1162 B-Y BUFF
R3501 15k :CHIP
R3502 10k :CHIP
R3503 3.3k :CHIP
C3500 0.1 25V B:CHIP
FB3500 BK2125 HM601
FB3501 BK2125 HM601
IC3500 CXD1178Q D/A CONVERTER
B-YDA (P2)
R-YDA (P2)
YDA (P2)
CDA (P2)
CDA7
CDA6
CDA5
CDA4
CDA3
CDA2
CDA1
CDA0
YDA0
YDA1
YDA2
YDA3
YDA4
YDA5
YDA6
YDA7
YDA
A5V
ADCK (P2)
YAD (P2)
IC3100 CXD1176Q A/D COVERTER
Q3101 2SA1162 BUFF
FB3100 BK2125 HM601
FB3101 BK2125 HM601
YO7
YO6
YO5
YO4
YO3
YO2
YO1
YO0
+5V
FL3130
Q3131 2SA1162 BUFF
IC3130 CXD1176Q A/D CONVERTER
FB3130 BK2125 HM601
FB3131 BK2125 HM601
CO7
CO6
CO5
CO4
CO3
CO2
CO1
CO0
CAD (P2)
R-YDE
FL3160
Q3161 2SA1162 BUFF
IC3160 CXD1176Q A/D CONVERTER
FB3160 BK2125 HM601
FB3161 BK2125 HM601
B-YDE
RB3160 10k×4
RB3161 10k×4
5V-2

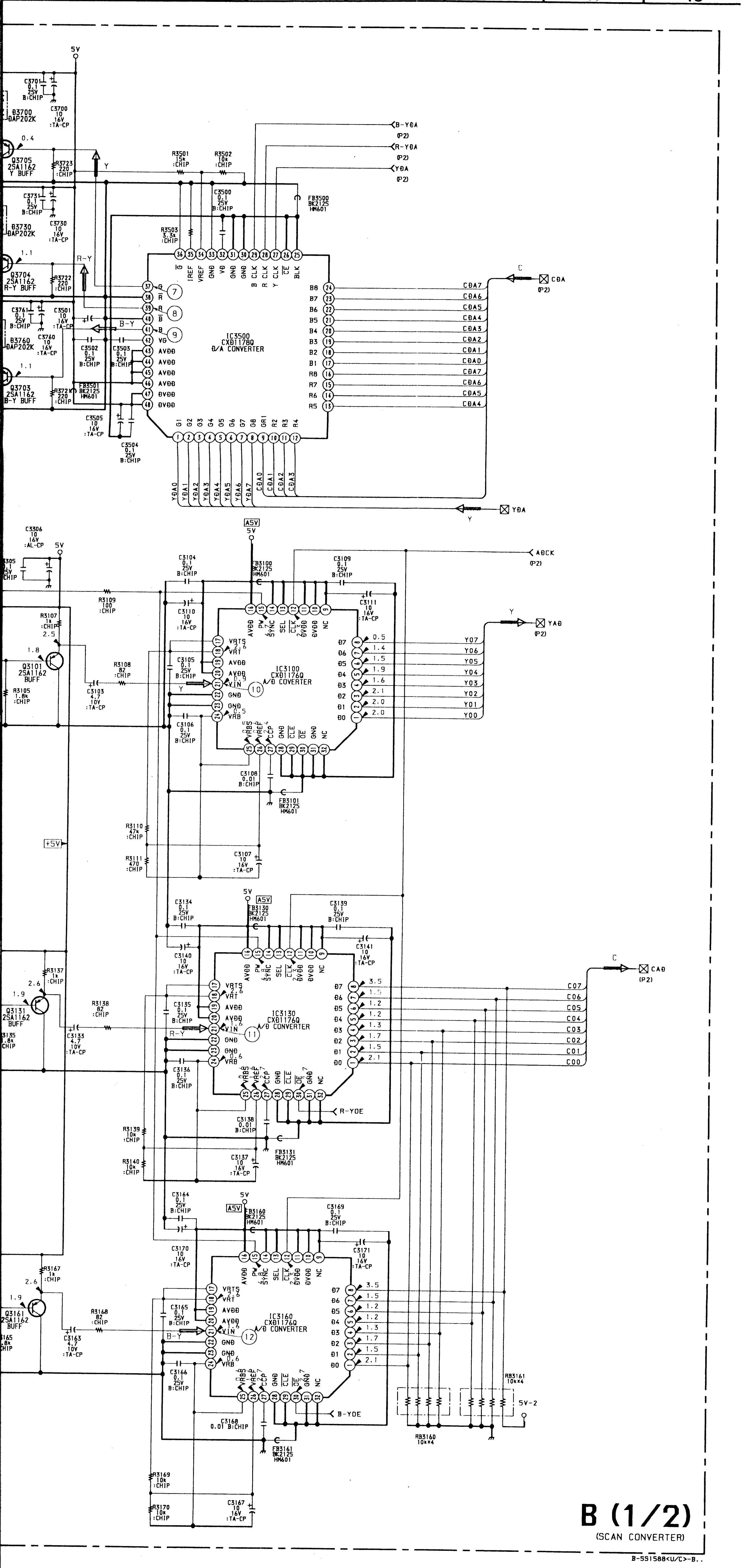
B (1/2)

(SCAN CONVERTER)

B-SS1588<U/C>-B..

B (1/2) BOARD


① 1.3Vp-p (H)
② 1.0Vp-p (H)
③ 1.
④ 1.4Vp-p (H)
⑤ 1.3Vp-p (H)
⑥ 2.
⑦ 1.6Vp-p (H)
⑧ 1.3Vp-p (H)
⑨ 1.
⑩ 2.0Vp-p (H)
⑪ 1.25Vp-p (H)
⑫ 1.2
⑬ 5.0Vp-p (H)
⑭ 5.0Vp-p (V)
⑮ 5.
⑯ 5.0Vp-p (V)

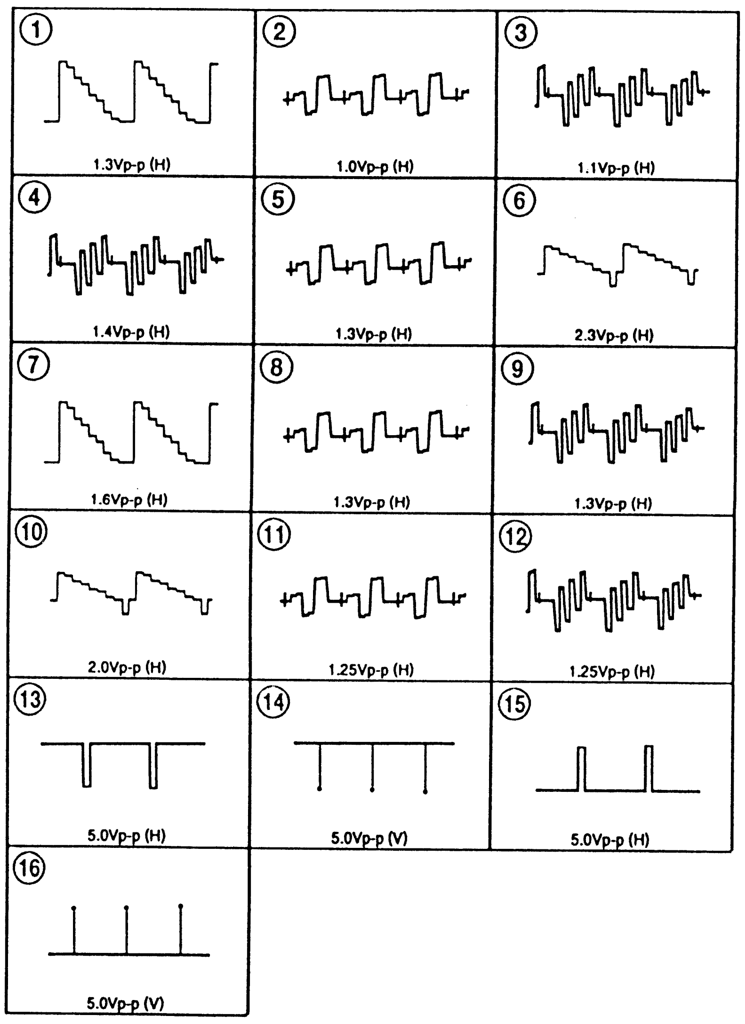

5V
C3701 0.1 25V B:CHIP
C3700 10 16V :TA-CP
D3700 DAP202K
Q3705 2SA1162 Y BUFF
R3723 220 :CHIP
Q3704 2SA1162 R-Y BUFF
R3722 220 :CHIP
Q3703 2SA1162 B-Y BUFF
R3501 15k :CHIP
R3502 10k :CHIP
C3500 0.1 25V B:CHIP
R3503 3.3k :CHIP
FB3500 BK2125 HM601
FB3501 BK2125 HM601
B-YDA (P2)
R-YDA (P2)
YDA (P2)
IC3500 CXD1178Q D/A CONVERTER
CDA (P2)
CDA7 CDA6 CDA5 CDA4 CDA3 CDA2 CDA1 CDA0
YDA0 YDA1 YDA2 YDA3 YDA4 YDA5 YDA6 YDA7
YDA
A5V
ADCK (P2)
IC3100 CXD1176Q A/D COVERTER
YAD (P2)
Y07 Y06 Y05 Y04 Y03 Y02 Y01 Y00
Q3101 2SA1162 BUFF
FB3100 BK2125 HM601
FB3101 BK2125 HM601
+5V
IC3130 CXD1176Q A/D CONVERTER
CAD (P2)
C07 C06 C05 C04 C03 C02 C01 C00
Q3131 2SA1162 BUFF
R-YOE
FB3130 BK2125 HM601
FB3131 BK2125 HM601
IC3160 CXD1176Q A/D CONVERTER
Q3161 2SA1162 BUFF
B-YOE
FB3160 BK2125 HM601
FB3161 BK2125 HM601
RB3160 10k×4
RB3161 10k×4
5V-2

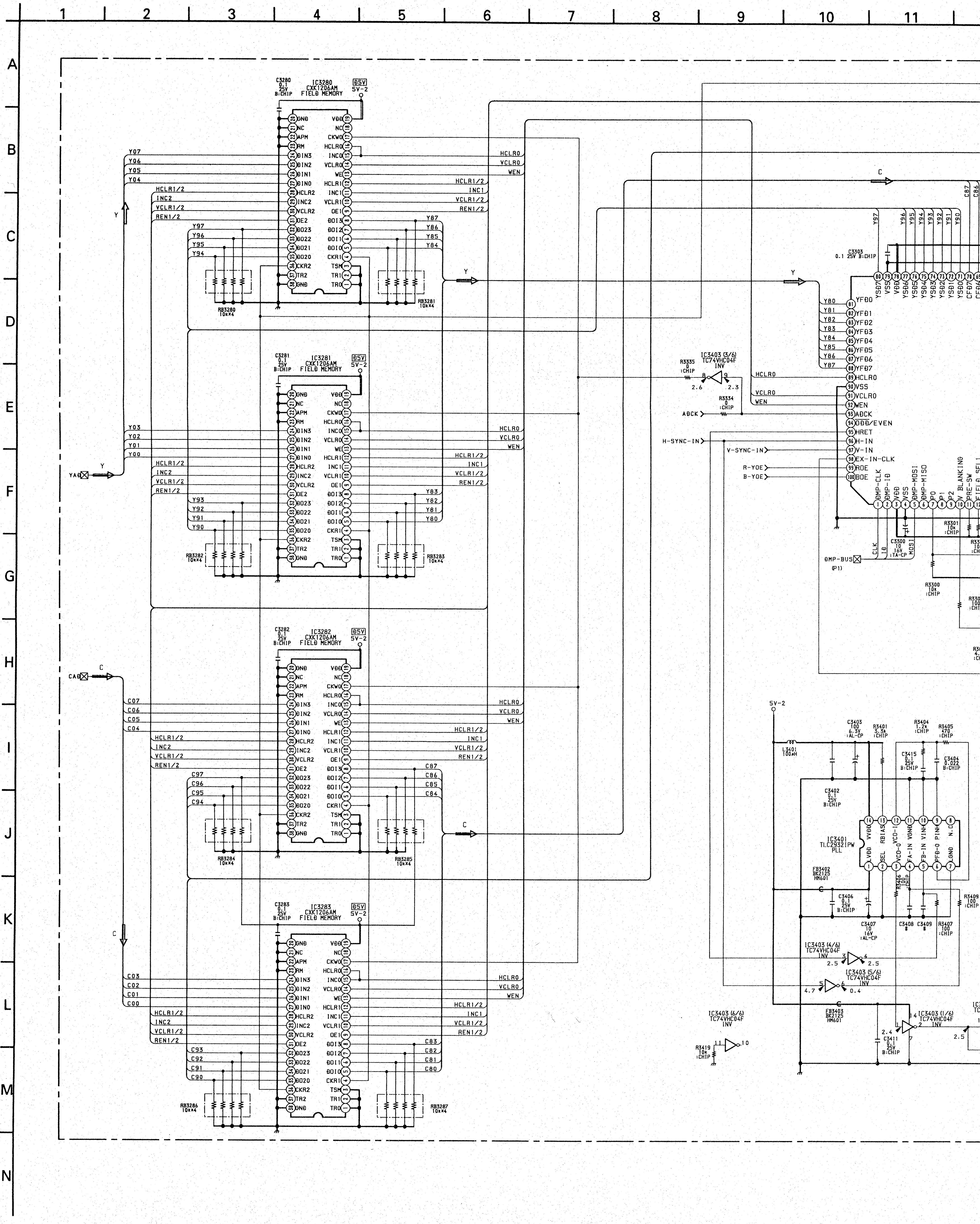
B (1/2)

(SCAN CONVERTER)

B-SS1588<U/C>-B..

B (1/2) BOARD




1
2
3
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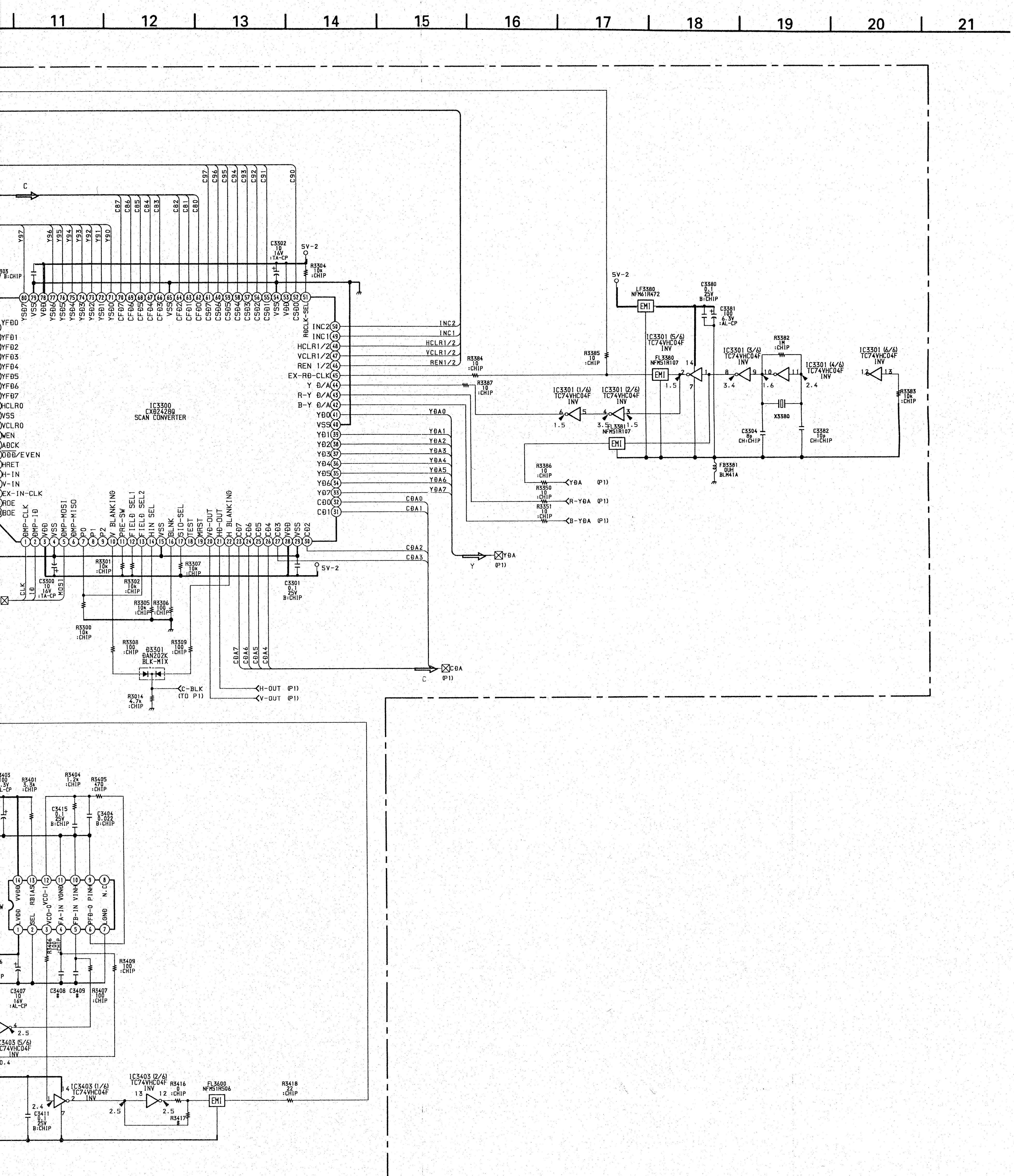
7
8
9
10
11
A
B
C
D
E
F
G
H
I
J
K
L
M
N
C3280 0.1 25V B:CHIP
IC3280 CXK1206AM FIELD MEMORY
C3281 0.1 25V B:CHIP
IC3281 CXK1206AM FIELD MEMORY
C3282 0.1 25V B:CHIP
IC3282 CXK1206AM FIELD MEMORY
C3283 0.1 25V B:CHIP
IC3283 CXK1206AM FIELD MEMORY
05V
5V-2
GND
NC
APM
RM
DIN3
DIN2
DIN1
DIN0
HCLR2
INC2
VCLR2
OE2
DO23
DO22
DO21
DO20
CKR2
TR2
VDD
CKWO
HCLRO
INCO
VCLRO
WE
HCLR1
INC1
VCLR1
OE1
DO13
DO12
DO11
DO10
CKR1
TSM
TR1
TRO
HCLRO
VCLRO
WEN
HCLR1/2
INC1
VCLR1/2
REN1/2
INC2
Y07
Y06
Y05
Y04
Y03
Y02
Y01
Y00
Y97
Y96
Y95
Y94
Y93
Y92
Y91
Y90
Y87
Y86
Y85
Y84
Y83
Y82
Y81
Y80
C07
C06
C05
C04
C03
C02
C01
C00
C97
C96
C95
C94
C93
C92
C91
C90
C87
C86
C85
C84
C83
C82
C81
C80
RB3280 10k×4
RB3281 10k×4
RB3282 10k×4
RB3283 10k×4
RB3284 10k×4
RB3285 10k×4
RB3286 10k×4
RB3287 10k×4
YA
CA
Y
C
IC3403 (3/6) TC74VHC04F INV
R3335 0 :CHIP
2.6
2.3
R3334 0 :CHIP
ADCK
H-SYNC-IN
V-SYNC-IN
R-YOE
B-YOE
C3303 0.1 25V B:CHIP
YSD7
VSS
VDD
YSD6
YSD5
YSD4
YSD3
YSD2
YSD1
YSD0
CFD7
YFD0
YFD1
YFD2
YFD3
YFD4
YFD5
YFD6
YFD7
HCLRO
VSS
VCLRO
WEN
ADCK
ODD/EVEN
HRET
H-IN
V-IN
EX-IN-CLK
ROE
BOE
DMP-CLK
DMP-ID
VDD
VSS
DMP-MOSI
DMP-MISO
P0
P1
P2
V BLANKING
PRE-SW
FIELD SEL
CLK
ID
MOSI
C3300 10 16V :TA-CP
DMP-BUS
(P1)
R3301 10k :CHIP
R3300 10k :CHIP
5V-2
L3401 100μH
C3403 100 6.3V :AL-CP
R3401 3.3k :CHIP
R3404 1.2k :CHIP
R3405 470 :CHIP
C3415 0.1 25V B:CHIP
C3404 0.022 B:CHIP
C3402 0.1 25V B:CHIP
IC3401 TLC2932IPW PLL
VDD
RBIAS
VCO-I
VCO-O
FA-IN
VGND
FB-IN
VINH
PFD-O
PINH
N.C
LVDD
SEL
LGND
FB3402 BK2125 HM601
R3406 :CHIP
C3406 0.1 25V B:CHIP
C3407 10 16V :AL-CP
C3408
C3409
R3407 100 :CHIP
R3409 100 :CHIP
IC3403 (4/6) TC74VHC04F INV
2.5
2.5
IC3403 (5/6) TC74VHC04F INV
4.7
0.4
IC3403 (6/6) TC74VHC04F INV
R3419 10k :CHIP
FB3403 BK2125 HM601
IC3403 (1/6) TC74VHC04F INV
2.4
C3411 0.1 25V B:CHIP
2.5


11
12
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15
16
17
18
19
20
21
IC3300
CXD2428Q
SCAN CONVERTER
INC2
INC1
HCLR1/2
VCLR1/2
REN1/2
EX-RD-CLK
Y D/A
R-Y D/A
B-Y D/A
YD0
VSS
YD1
YD2
YD3
YD4
YD5
YD6
YD7
CD0
CD1
YDA0
YDA1
YDA2
YDA3
YDA4
YDA5
YDA6
YDA7
CDA0
CDA1
CDA2
CDA3
5V-2
C3302 10 16V :TA-CP
R3304 10k :CHIP
C3300 10 16V :TA-CP
C3301 0.1 25V B:CHIP
R3301 10k :CHIP
R3302 10k :CHIP
R3305 10k :CHIP
R3306 100 :CHIP
R3307 10k :CHIP
R3300 10k :CHIP
R3308 100 :CHIP
D3301 DAN202K BLK-MIX
R3309 100 :CHIP
R3014 4.7k :CHIP
C-BLK (TO P1)
H-OUT (P1)
V-OUT (P1)
CDA (P1)
YDA (P1)
R-YDA (P1)
B-YDA (P1)
R3384 10 :CHIP
R3387 10 :CHIP
R3386 10 :CHIP
R3350 10 :CHIP
R3351 10 :CHIP
R3385 10 :CHIP
LF3380 NFM61R472
C3380 0.1 25V B:CHIP
C3381 100 6.3V :AL-CP
FL3380 NFM51R107
FL3381 NFM51R107
IC3301 (1/6) TC74VHC04F INV
IC3301 (2/6) TC74VHC04F INV
IC3301 (3/6) TC74VHC04F INV
IC3301 (4/6) TC74VHC04F INV
IC3301 (5/6) TC74VHC04F INV
IC3301 (6/6) TC74VHC04F INV
R3382 1M :CHIP
R3383 10k :CHIP
X3380
C3304 8p CH:CHIP
C3382 10p CH:CHIP
FB3381 0UH BLM41A
EMI
R3401 3.3k :CHIP
R3404 1.2k :CHIP
R3405 470 :CHIP
C3415 0.1 25V B:CHIP
C3404 0.022 B:CHIP
R3406 100 :CHIP
R3409 100 :CHIP
R3407 100 :CHIP
C3407 10 16V :AL-CP
C3408
C3409
C3411 0.1 25V B:CHIP
IC3403 (1/6) TC74VHC04F INV
IC3403 (2/6) TC74VHC04F INV
IC3403 (5/6) TC74VHC04F INV
R3416 0 :CHIP
R3417
FL3600 NFM51R504
R3418 22 :CHIP

B (2/2)

(SCAN CONVERTER)

B-SS1588<U/C>-B..

C [PANEL DRIVE, CPU]

(US/Canadian Model)

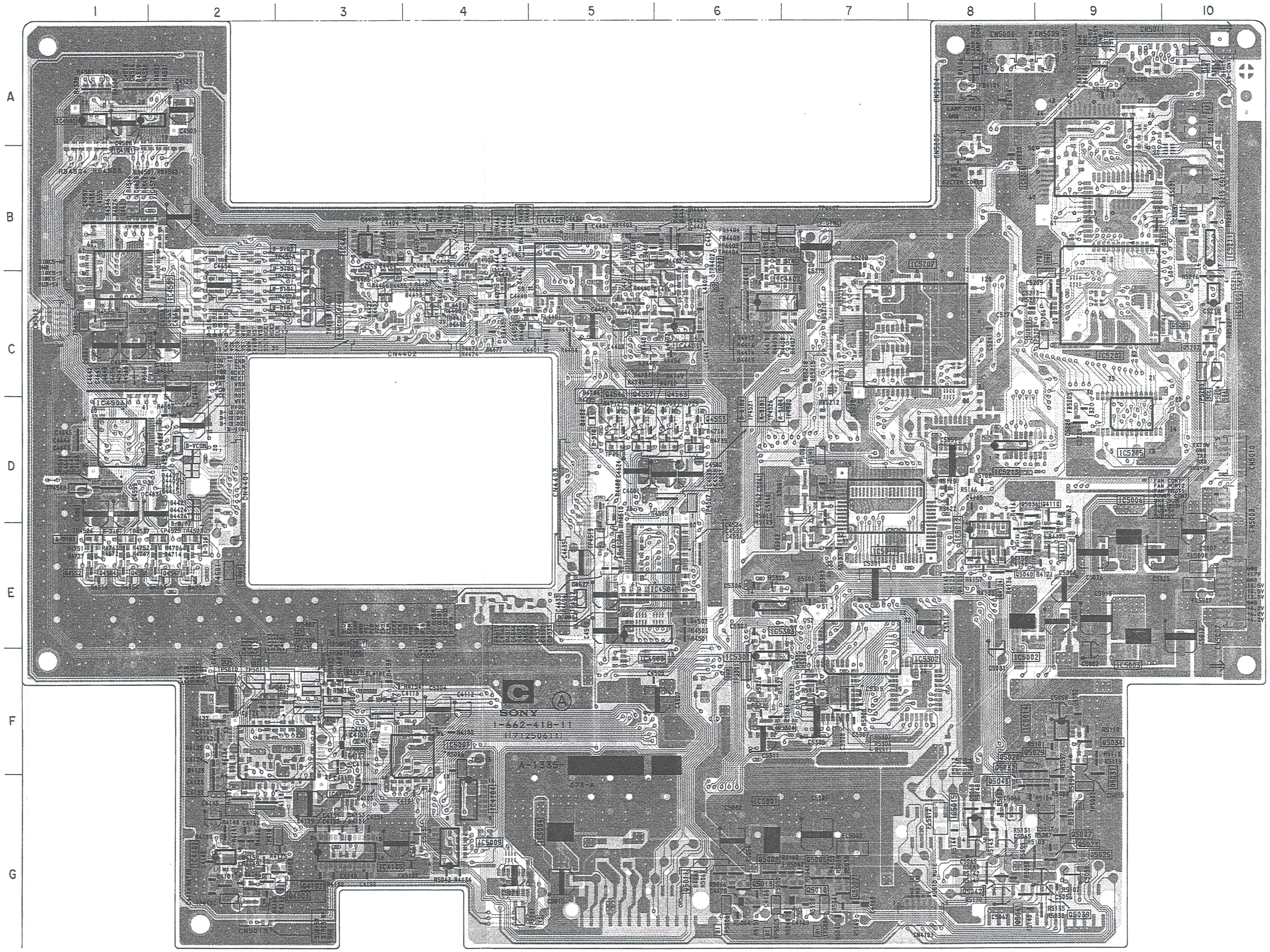
– C BOARD – <Component Side>

C BOARD
(COMPONENT SIDE)

IC	
IC4101	F-2
IC4102	G-2
IC4104	G-4
IC4105	G-3
IC4401	C-6
IC4402	C-6
IC4403	B-5
IC4404	B-3
IC4501	A-1
IC4502	A-1
IC4503	E-5
IC4504	E-6
IC4505	B-1
IC4506	D-1
IC5001	G-6
IC5002	E-8
IC5003	E-9
IC5004	G-5
IC5006	E-9
IC5007	F-4
IC5009	G-4
IC5011	D-7
IC5012	E-8
IC5014	F-9
IC5202	C-9
IC5205	D-9
IC5207	C-8
IC5208	B-9
IC5209	C-10
IC5211	B-10
IC5213	D-8
IC5301	F-6
IC5302	F-7
IC5303	E-6

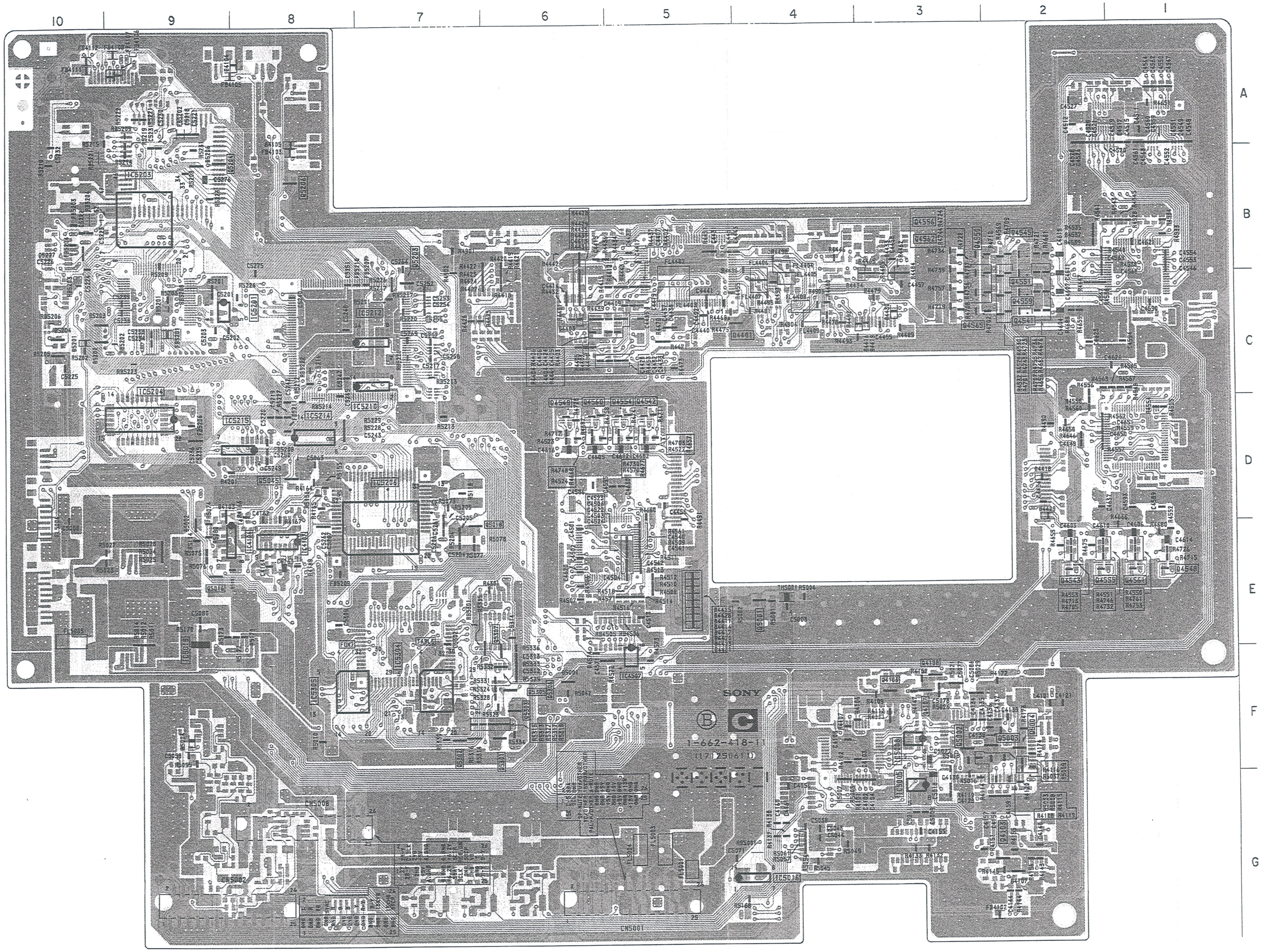
TRANSISTOR	
Q4101	G-2
Q4102	G-2
Q4104	E-8
Q4105	E-8
Q4546	D-5
Q4547	E-2
Q4552	E-1
Q4553	D-6
Q4557	D-5
Q4558	E-1
Q4563	D-6
Q4564	E-1
Q5007	G-7
Q5010	G-7
Q5013	G-6
Q5023	G-9
Q5025	G-9
Q5027	G-9
Q5028	F-9
Q5029	F-9
Q5031	G-9
Q5032	F-8
Q5034	F-9
Q5036	D-8
Q5040	E-8
Q5201	C-10
Q5202	C-10
Q5205	B-9
Q5304	F-6

DIODE	
D4101	G-2
D4102	G-3
D4106	A-8
D4404	B-3
D4407	D-2
D4408	C-4
D4409	D-2
D4410	C-4
D4412	D-2
D4413	C-4
D4415	D-2
D4421	D-2
D4422	C-3
D4424	D-2
D4426	D-2
D4427	C-3
D4432	D-5
D5301	E-7



- ░ : Pattern from the side which enables seeing.
- ▓ : Pattern of the rear side.

<Conductor Side>



C BOARD
(CONDUCTOR SIDE)

IC	
IC4106	E-9
IC4107	E-8
IC4507	F-5
IC5005	G-3
IC5008	F-3
IC5016	G-4
IC5019	E-9
IC5201	C-9
IC5203	B-9
IC5204	B-9
IC5206	D-7
IC5210	C-7
IC5212	C-7
IC5214	D-8
IC5215	D-8
IC5304	F-7
IC5305	F-8

TRANSISTOR	
Q4103	G-2
Q4401	C-4
Q4541	C-2
Q4542	D-5
Q4543	E-2
Q4545	B-2
Q4548	E-1
Q4549	D-6
Q4550	B-3
Q4551	C-2
Q4554	D-5
Q4555	E-2
Q4556	C-3
Q4559	C-2
Q4560	D-6
Q4561	E-1
Q4562	C-3
Q4565	C-3
Q5001	E-4
Q5002	F-3
Q5003	F-2
Q5004	F-2
Q5016	E-9
Q5018	D-7
Q5045	D-8
Q5203	C-7
Q5204	B-9
Q5206	B-8
Q5301	F-6
Q5302	F-7
Q5303	F-6
Q5305	F-6
Q5306	F-6
Q5307	F-6

DIODE	
D4103	D-9
D4104	A-8
D4105	A-8
D4402	C-6
D4403	C-6
D4411	E-5
D4414	E-5
D4416	C-3
D4417	E-5
D4418	D-2
D4419	C-3
D4420	E-5
D4423	E-5
D4425	E-5
D4428	E-5
D4429	D-2
D4430	C-3
D4431	E-5
D5001	F-6
D5002	D-9
D5004	F-9
D5201	C-10
D5202	C-10
D5203	C-10
D5204	C-10
D5205	C-10
D5206	B-9

C BOARD
(COMPONENT SIDE)

IC	
IC4101	F-2
IC4102	G-2
IC4104	G-4
IC4105	G-3
IC4401	C-6
IC4402	C-6
IC4403	B-5
IC4404	B-3
IC4501	A-1
IC4502	A-1
IC4503	E-5
IC4504	E-6
IC4505	B-1
IC4506	D-1
IC5001	G-6
IC5002	E-8
IC5003	E-9
IC5004	G-5
IC5006	E-9
IC5007	F-4
IC5009	G-4
IC5011	D-7
IC5012	E-8
IC5014	F-9
IC5202	C-9
IC5205	D-9
IC5207	C-8
IC5208	B-9
IC5209	C-10
IC5211	B-10
IC5213	D-8
IC5301	F-6
IC5302	F-7
IC5303	E-6

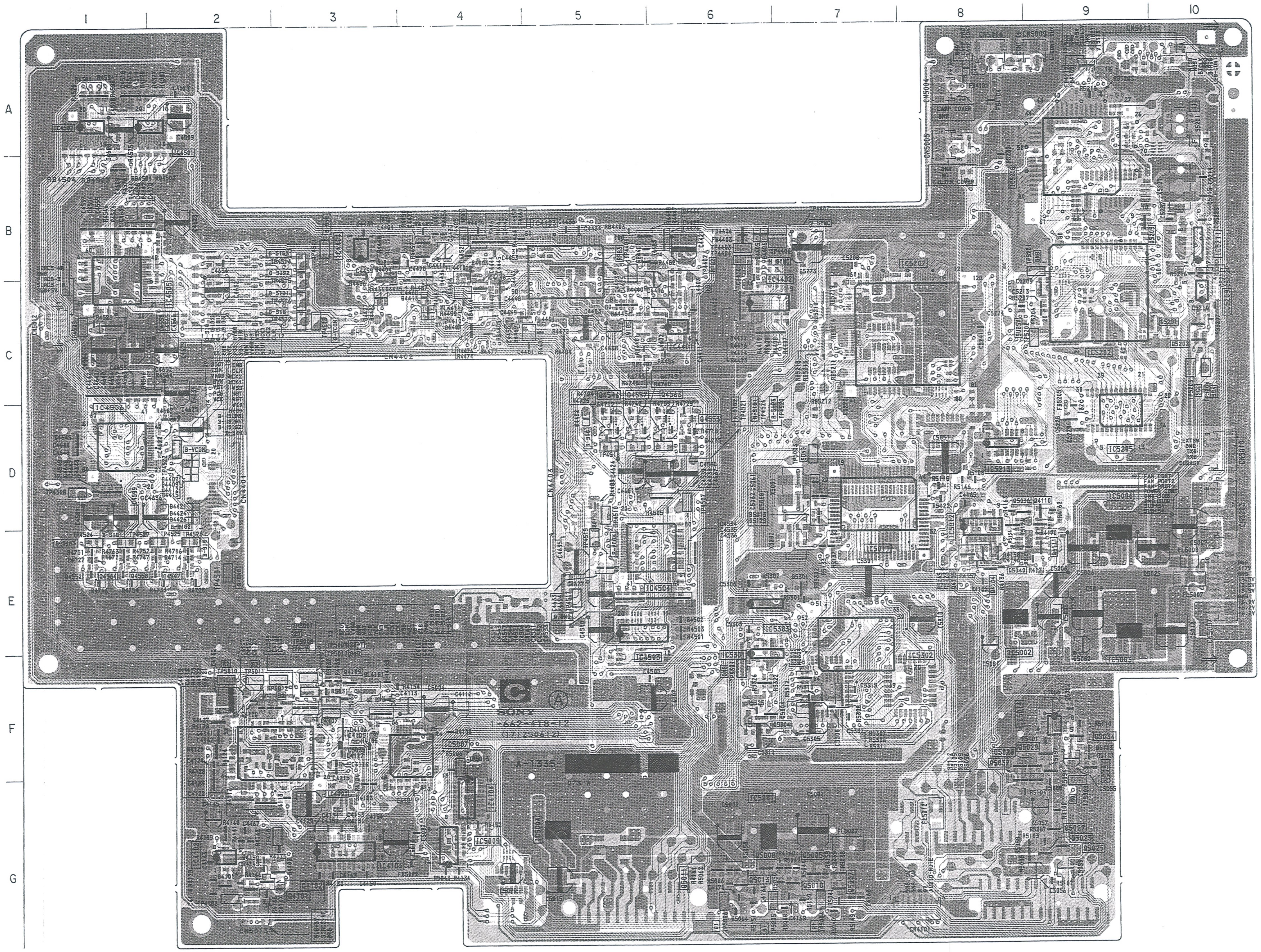
TRANSISTOR	
Q4101	G-2
Q4102	G-2
Q4104	E-8
Q4105	E-8
Q4546	D-5
Q4547	E-2
Q4552	E-1
Q4553	D-6
Q4557	D-5
Q4558	E-1
Q4563	D-6
Q4564	E-1
Q5007	G-7
Q5010	G-7
Q5013	G-6
Q5023	G-9
Q5025	G-9
Q5027	G-9
Q5028	F-9
Q5029	F-9
Q5031	G-9
Q5032	F-8
Q5034	F-9
Q5036	D-8
Q5040	E-8
Q5201	C-10
Q5202	C-10
Q5205	B-9
Q5304	F-6

DIODE	
D4101	G-2
D4102	G-3
D4106	A-8
D4404	B-3
D4407	D-2
D4408	C-4
D4409	D-2
D4410	C-4
D4412	D-2
D4413	C-4
D4415	D-2
D4421	D-2
D4422	C-3
D4424	D-2
D4426	D-2
D4427	C-3
D4432	D-5
D5301	E-7

C [PANEL DRIVE, CPU]

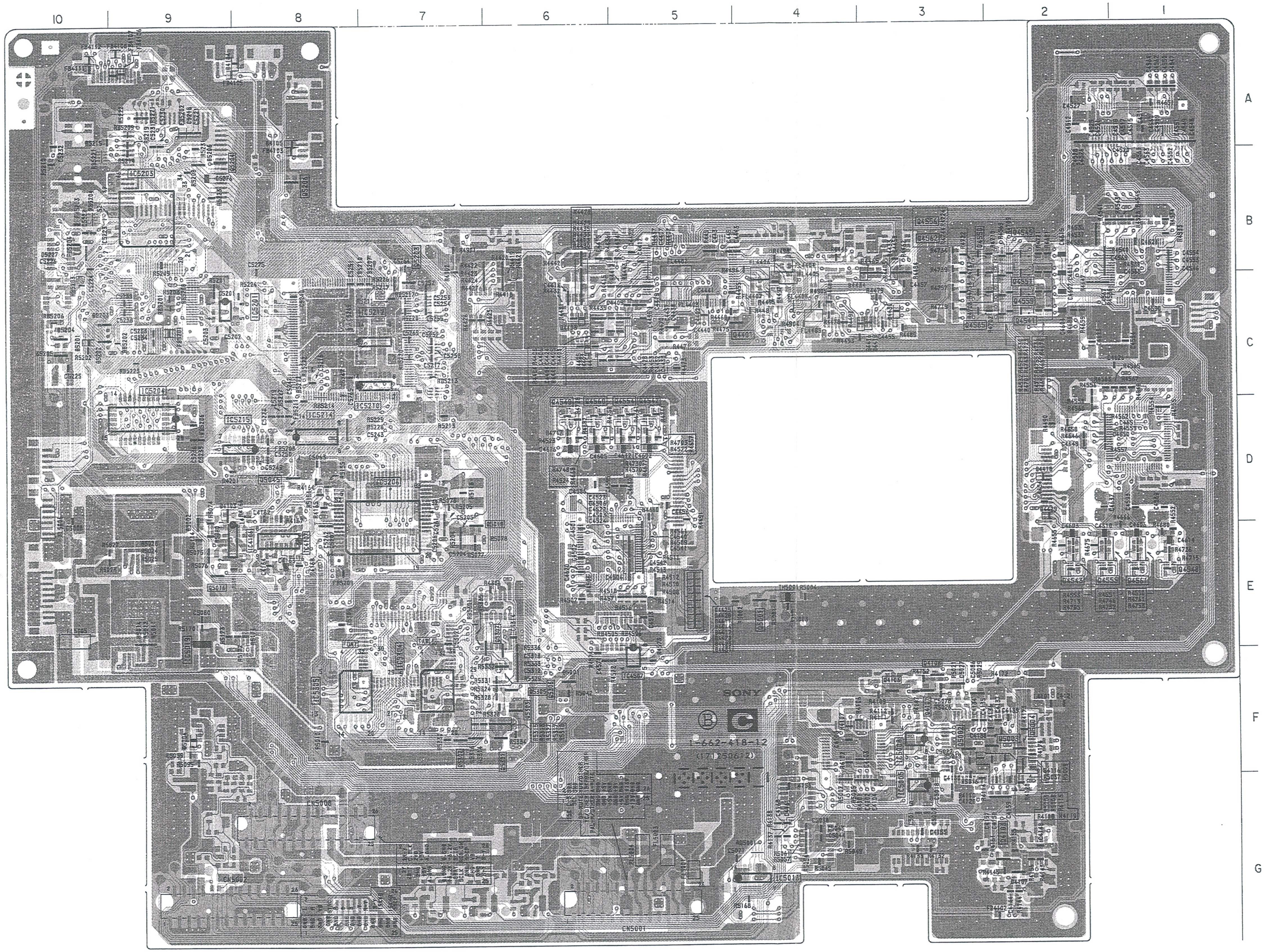
(AEP Model)

– **C BOARD** – <Component Side>



• ░ : Pattern from the side which enables seeing.
• ▓ : Pattern of the rear side.

<Conductor Side>



C BOARD (CONDUCTOR SIDE)

IC

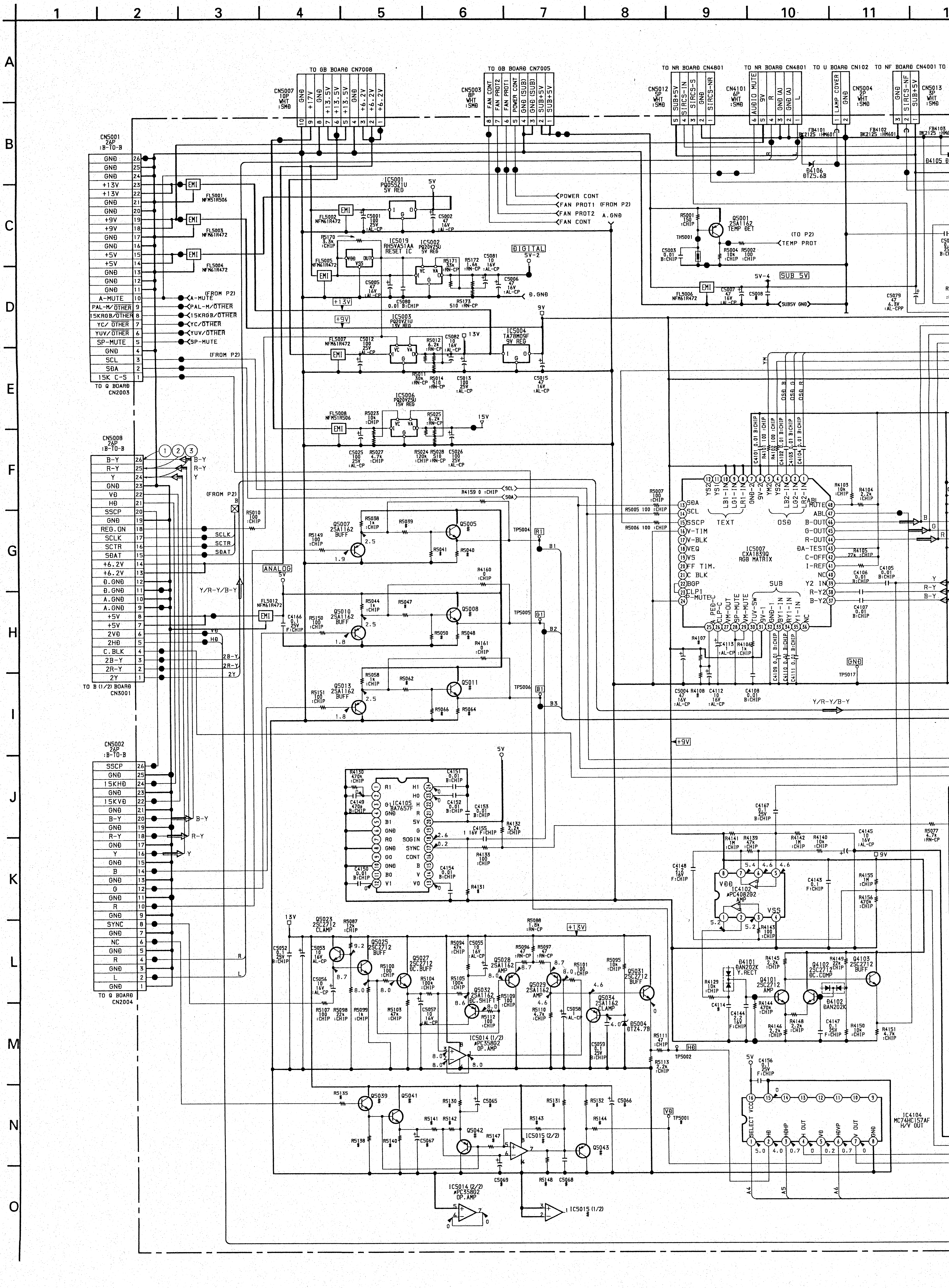
IC4106	E-9
IC4107	E-8
IC4507	F-5
IC5005	G-3
IC5008	F-3
IC5016	G-4
IC5019	E-9
IC5201	C-9
IC5203	B-9
IC5204	B-9
IC5206	D-7
IC5210	C-7
IC5212	C-7
IC5214	D-8
IC5215	D-8
IC5304	F-7
IC5305	F-8

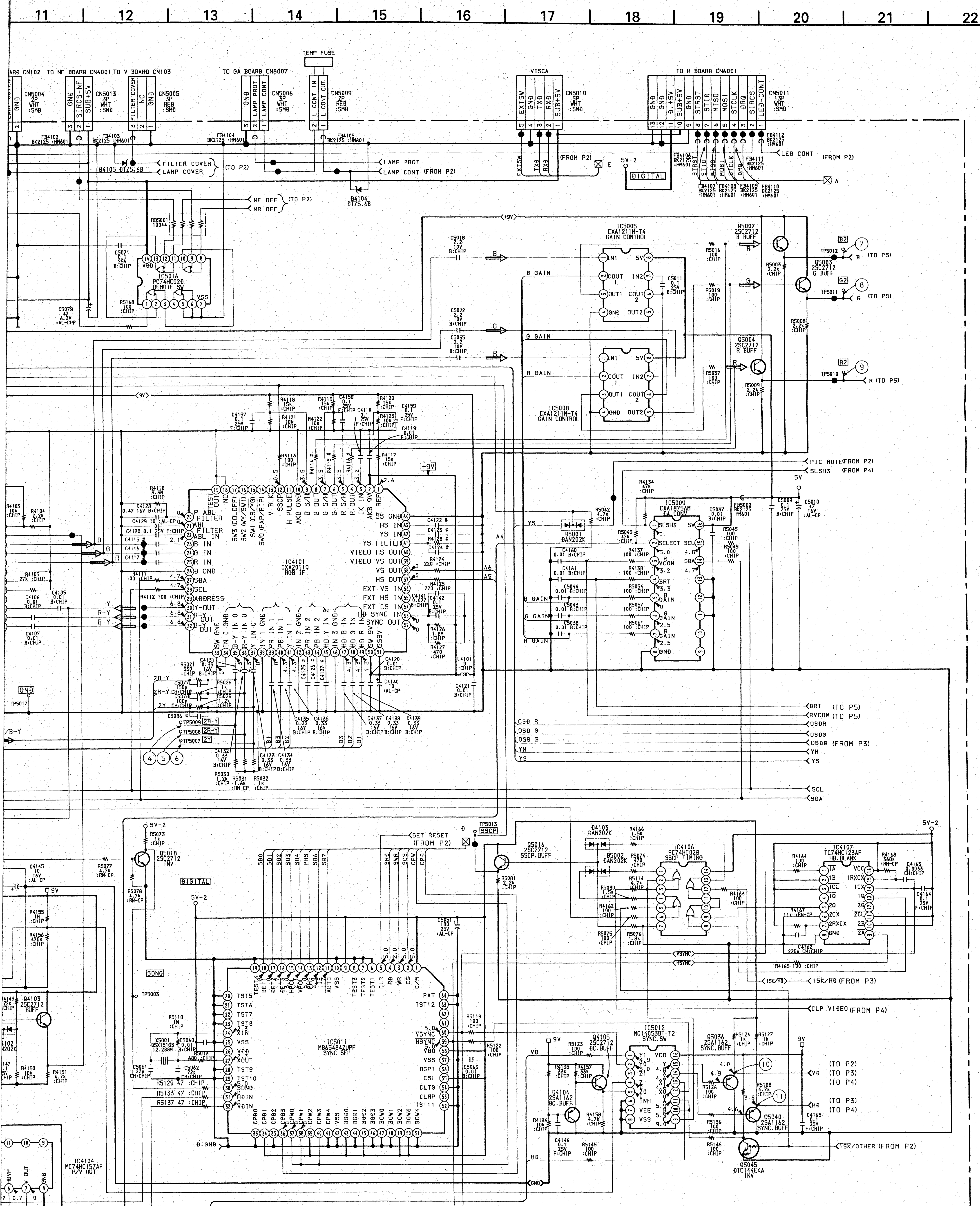
TRANSISTOR

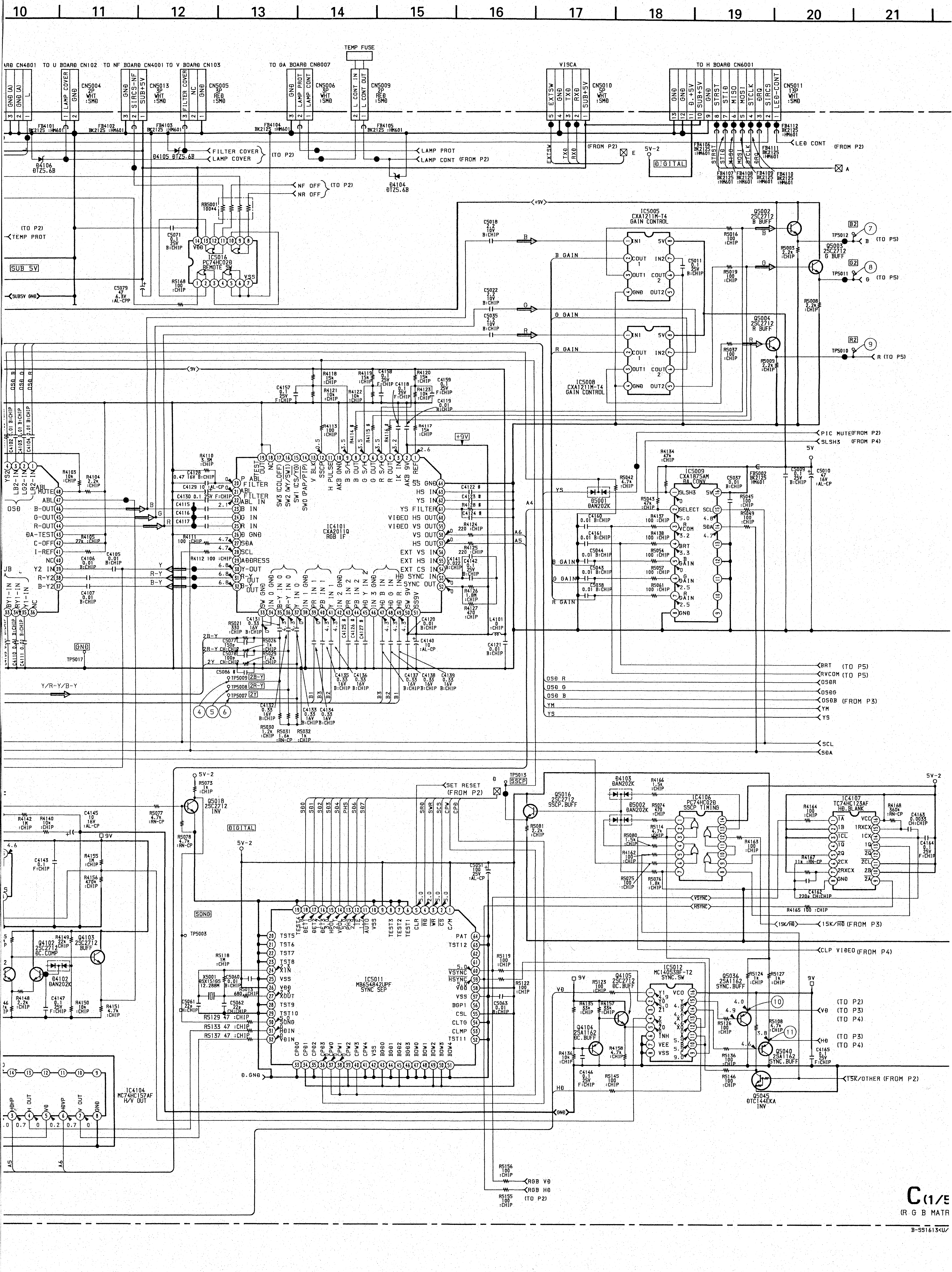
Q4103	G-2
Q4401	C-4
Q4541	C-2
Q4542	D-5
Q4543	E-2
Q4545	B-2
Q4548	E-1
Q4549	D-6
Q4550	B-3
Q4551	C-2
Q4554	D-5
Q4555	E-2
Q4556	C-3
Q4559	C-2
Q4560	D-6
Q4561	E-1
Q4562	C-3
Q4565	C-3
Q5001	E-4
Q5002	F-3
Q5003	F-2
Q5004	F-2
Q5016	E-9
Q5018	D-7
Q5045	D-8
Q5203	C-7
Q5204	B-9
Q5206	B-8
Q5301	F-6
Q5302	F-7
Q5303	F-6
Q5305	F-6
Q5306	F-6
Q5307	F-6

DIODE

D4103	D-9
D4104	A-8
D4105	A-8
D4402	C-6
D4403	C-6
D4411	E-5
D4414	E-5
D4416	C-3
D4417	E-5
D4418	D-2
D4419	C-3
D4420	E-5
D4423	E-5
D4425	E-5
D4428	E-5
D4429	D-2
D4430	C-3
D4431	E-5
D5001	F-6
D5002	D-9
D5004	F-9
D5201	C-10
D5202	C-10
D5203	C-10
D5204	C-10
D5205	C-10
D5206	B-9


TO GB BOARD CN7008
TO GB BOARD CN7005
TO NR BOARD CN4801
TO U BOARD CN102
TO NF BOARD CN4001
CN5001 26P :B-TO-B
CN5007 10P WHT :SMD
CN5003 8P WHT :SMD
CN5012 5P WHT :SMD
CN4101 6P WHT :SMD
CN5004 2P WHT :SMD
CN5013 3P WHT :SMD
IC5001 PQ05SZ1U 5V REG
IC5019 RH5VA51AA RESET IC
IC5002 PQ20VZ5U 5V REG
IC5003 PQ20VZ1U 13V REG
IC5004 TA78M09F 9V REG
IC5006 PQ20VZ5U 15V REG
Q5001 2SA1162 TEMP DET
POWER CONT
FAN PROT1 (FROM P2)
FAN PROT2
FAN CONT
TEMP PROT
DIGITAL
SUB 5V
ANALOG
TO Q BOARD CN2003
CN5008 26P :B-TO-B
TO B (1/2) BOARD CN3001
CN5002 26P :B-TO-B
TO Q BOARD CN2004
IC5007 CXA1839Q RGB MATRIX
IC4105 BA7657F
IC4102 μPC4082O2 AMP
IC4104 MC74HC157AF H/V OUT
IC5014 (1/2) μPC358G2 OP.AMP
IC5014 (2/2) μPC358G2 OP.AMP
IC5015 (2/2)
IC5015 (1/2)
Q5007 2SA1162 BUFF
Q5010 2SA1162 BUFF
Q5013 2SA1162 BUFF
Q5023 2SC2712 CLAMP
Q5025 2SC2712 BUFF
Q5027 2SC2712 DC.BUFF
Q5028 2SA1162 AMP
Q5029 2SA1162 AMP
Q5032 2SA1162 DC.SHIFT
Q5034 2SA1162 CLAMP
Q5031 2SC2712 BUFF
Q4101 2SC2712 AMP
Q4102 2SC2712 DC.COMP
Q4103 2SC2712 BUFF
D4101 DAN202K Y.RECT
D4102 DAN202K
D4106 DTZ5.6B
D5004 DTZ4.7B
Y/R-Y/B-Y
1 2 3 4 5 6 7 8 9 10 11
A B C D E F G H I J K L M N O

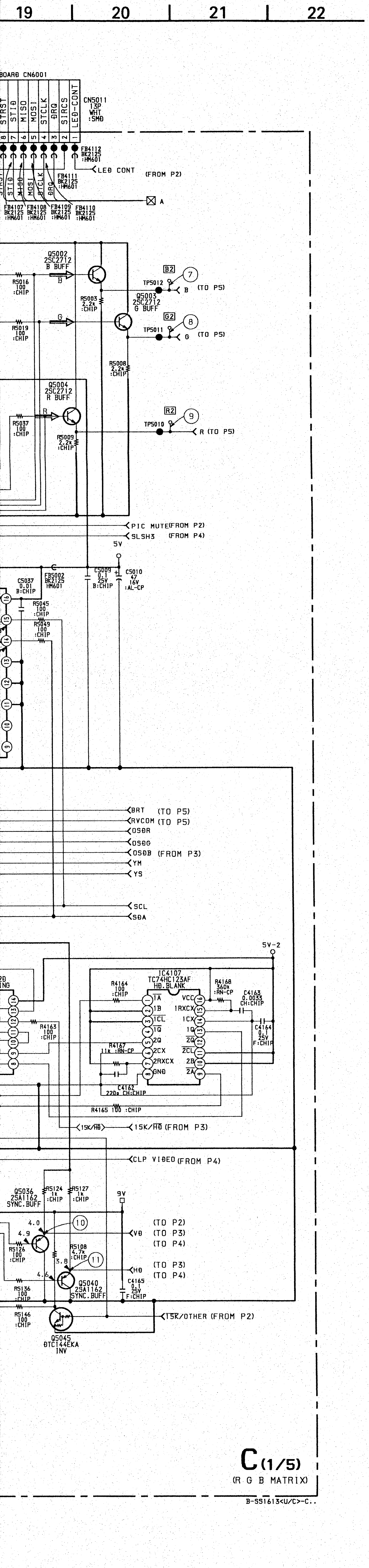

11
12
13
14
15
16
17
18
19
20
21
22
TEMP FUSE
TO NF BOARD CN4001
TO V BOARD CN103
TO GA BOARD CN8007
VISCA
TO H BOARD CN6001
CN5004 2P WHT :SMD
CN5013 3P WHT :SMD
CN5005 3P RED :SMD
CN5006 3P WHT :SMD
CN5009 2P RED :SMD
CN5010 5P WHT :SMD
CN5011 13P WHT :SMD
FILTER COVER
LAMP COVER
LAMP PROT
LAMP CONT (FROM P2)
NF OFF
NR OFF
(TO P2)
(FROM P2)
LED CONT
DIGITAL
IC5005 CXA1211M-T4 GAIN CONTROL
IC5008 CXA1211M-T4 GAIN CONTROL
Q5002 2SC2712 B BUFF
Q5003 2SC2712 G BUFF
Q5004 2SC2712 R BUFF
B GAIN
G GAIN
R GAIN
(TO P5)
IC5016 PC74HC020 REMOTE SW
IC4101 CXA2011Q RGB IF
IC5009 CXA1875AM DA CONV
D5001 DAN202K
PIC MUTE(FROM P2)
SLSH3 (FROM P4)
BRT (TO P5)
RVCOM (TO P5)
OSDR
OSDG
OSDB (FROM P3)
YM
YS
SCL
SDA
Q5018 2SC2712 INV
Q5016 2SC2712 SSCP.BUFF
SET RESET (FROM P2)
IC4106 PC74HC02D SSCP TIMING
IC4107 TC74HC123AF HD.BLANK
15K/HD (FROM P3)
IC5011 MB654842UPF SYNC SEP
SONG
CLP VIDEO(FROM P4)
IC5012 MC14053BF-T2 SYNC.SW
Q4105 2SC2712 BC.BUFF
Q4104 2SA1162 BC.BUFF
Q5036 2SA1162 SYNC.BUFF
Q5040 2SA1162 SYNC.BUFF
Q5045 DTC144EKA INV
15K/OTHER (FROM P2)
(TO P2)
(TO P3)
(TO P4)
IC4104 MC74HC157AF H/V OUT
Q4103 2SC2712 BUFF
RGB VD
RGB HD
(TO P2)
C(1/5)
(R G B MATRIX)
B-SS1613<U/C>-C..


10
11
12
13
14
15
16
17
18
19
20
21
TEMP FUSE
TO U BOARD CN102
TO NF BOARD CN4001
TO V BOARD CN103
TO GA BOARD CN8007
VISCA
TO H BOARD CN6001
CN5004 2P WHT :SMD
CN5013 3P WHT :SMD
CN5005 3P RED :SMD
CN5006 3P WHT :SMD
CN5009 2P RED :SMD
CN5010 5P WHT :SMD
CN5011 13P WHT :SMD
FILTER COVER
LAMP COVER
LAMP PROT
LAMP CONT (FROM P2)
NF OFF
NR OFF
TEMP PROT
SUB 5V
LED CONT (FROM P2)
DIGITAL
IC5016 PC74HC02D REMOTE SW
IC5005 CXA1211M-T4 GAIN CONTROL
IC5008 CXA1211M-T4 GAIN CONTROL
Q5002 2SC2712 B BUFF
Q5003 2SC2712 G BUFF
Q5004 2SC2712 R BUFF
B GAIN
G GAIN
R GAIN
B (TO P5)
G (TO P5)
R (TO P5)
IC4101 CXA2011Q RGB IF
IC5009 CXA1875AM DA CONV
PIC MUTE (FROM P2)
SLSH3 (FROM P4)
BRT (TO P5)
RVCOM (TO P5)
OSDR
OSDG
OSDB (FROM P3)
YM
YS
SCL
SDA
Y/R-Y/B-Y
Q5018 2SC2712 INV
Q5016 2SC2712 SSCP BUFF
SET RESET (FROM P2)
IC5011 MB654842UPF SYNC SEP
IC4106 PC74HC02D SSCP TIMING
IC4107 TC74HC123AF HD BLANK
15K/HD (FROM P3)
CLP VIDEO (FROM P4)
IC5012 MC14053BF-T2 SYNC SW
Q4105 2SC2712 DC BUFF
Q4104 2SA1162 DC BUFF
Q5036 2SA1162 SYNC BUFF
Q5040 2SA1162 SYNC BUFF
Q5045 DTC144EKA INV
15K/OTHER (FROM P2)
Q4102 2SC2712 DC COMP
Q4103 2SC2712 BUFF
IC4104 MC74HC157AF H/V OUT
RGB VD
RGB HD (TO P2)
GND

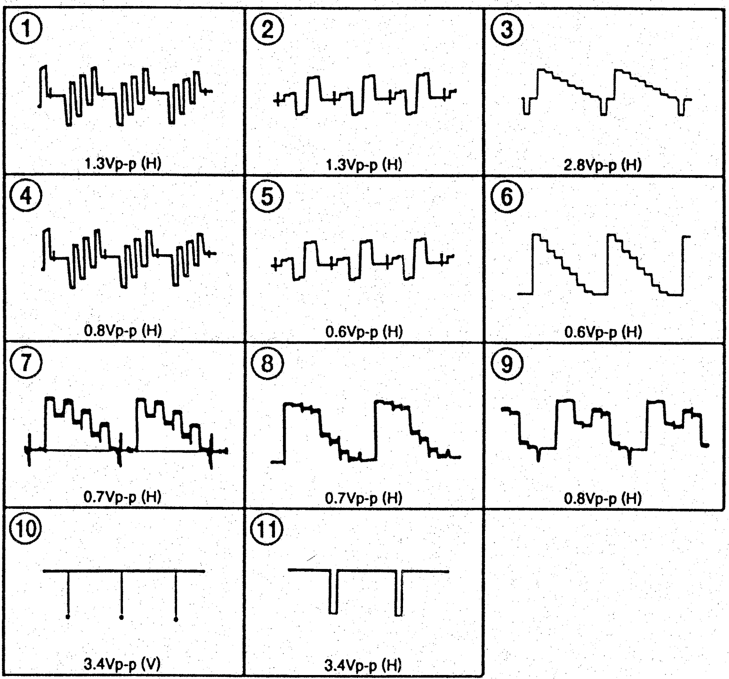
C (1/5

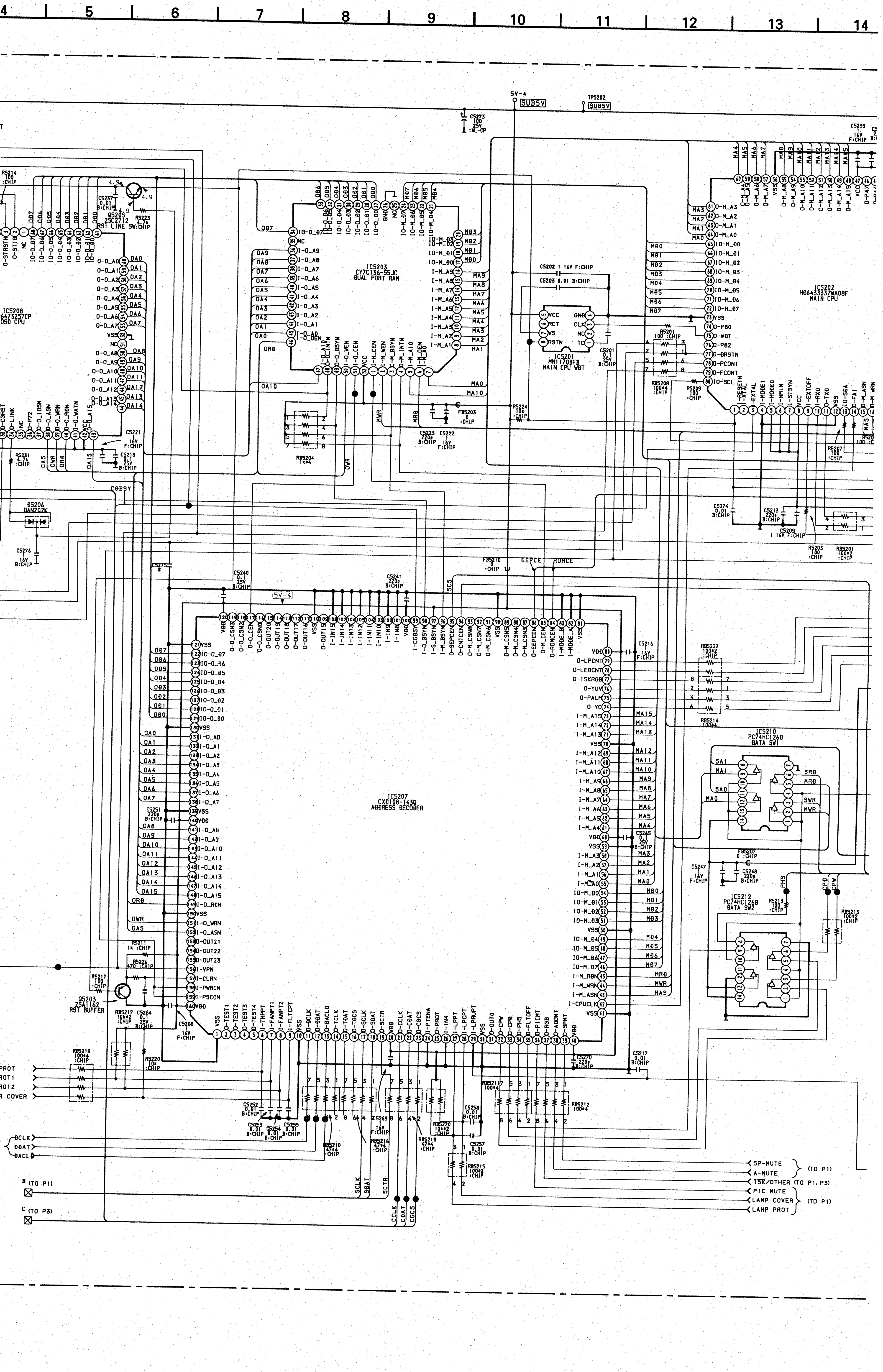
(R G B MATR

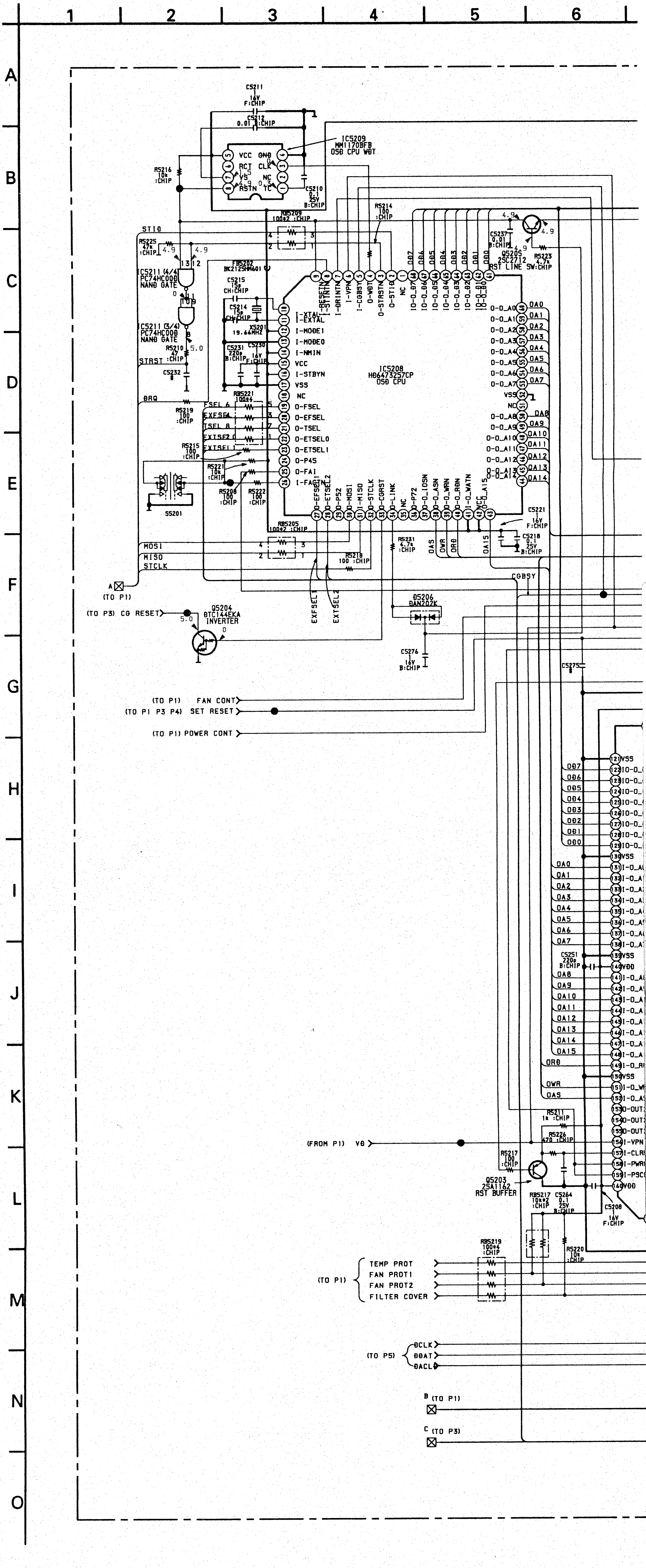
B-551613<U/

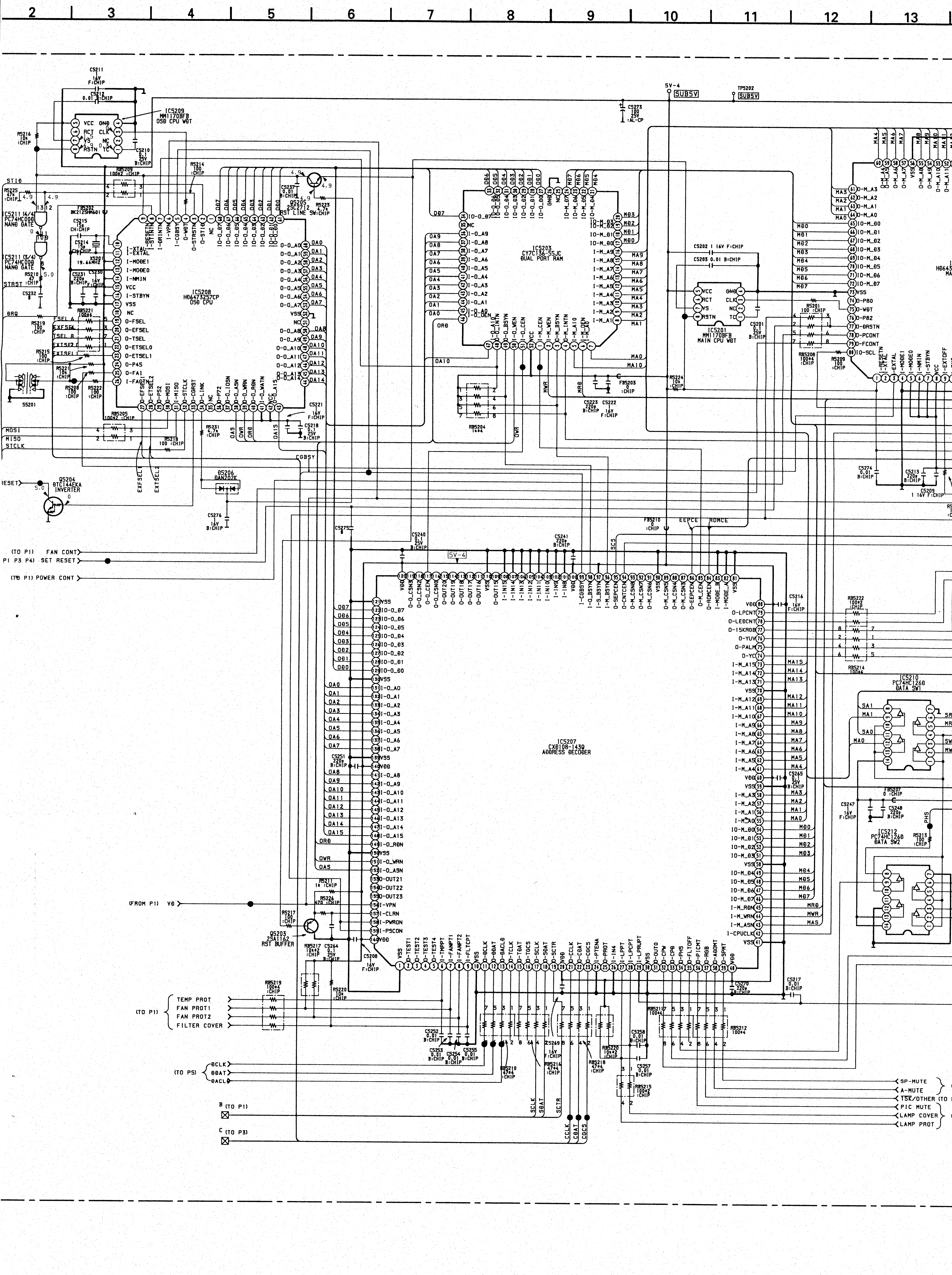

19
20
21
22
BOARD CN6001
STRST
STID
MISO
MOSI
STCLK
DRQ
SIRCS
LED-CONT
CN5011
13P
WHT
:SMD
FB4112
BK2125
:HM601
LED CONT
(FROM P2)
FB4111
BK2125
:HM601
A
FB4107
FB4108
FB4109
FB4110
BK2125
:HM601
Q5002
2SC2712
B BUFF
R5016
100
:CHIP
R5003
2.2k
:CHIP
Q5003
2SC2712
G BUFF
B2
TP5012
7
B (TO P5)
G2
TP5011
8
G (TO P5)
R5019
100
:CHIP
R5008
2.2k
:CHIP
Q5004
2SC2712
R BUFF
R2
TP5010
9
R (TO P5)
R5037
100
:CHIP
R5009
2.2k
:CHIP
PIC MUTE(FROM P2)
SLSH3 (FROM P4)
5V
C5037
0.01
B:CHIP
FB5002
BK2125
HM601
C5009
0.1
25V
B:CHIP
C5010
47
16V
:AL-CP
R5045
100
:CHIP
R5049
100
:CHIP
BRT (TO P5)
RVCOM (TO P5)
OSDR
OSDG
OSDB (FROM P3)
YM
YS
SCL
SDA
5V-2
IC4107
TC74HC123AF
HD.BLANK
R4164
100
:CHIP
R4168
360k
:RN-CP
C4163
0.0033
CH:CHIP
1A
1B
1CL
1Q
2Q
2CX
2RXCX
GND
VCC
1RXCX
1CX
1Q
2Q
2CL
2B
2A
R4163
100
:CHIP
C4164
0.1
25V
F:CHIP
R4167
11k :RN-CP
C4162
220p CH:CHIP
R4165 100 :CHIP
15K/HD
15K/HD (FROM P3)
CLP VIDEO (FROM P4)
Q5036
2SA1162
SYNC.BUFF
R5124
1k
:CHIP
R5127
1k
:CHIP
9V
4.0
4.9
10
R5126
100
:CHIP
R5108
4.7k
:CHIP
11
3.8
4.6
VD (TO P2)
(TO P3)
(TO P4)
HD (TO P3)
(TO P4)
Q5040
2SA1162
SYNC.BUFF
C4165
0.1
25V
F:CHIP
R5136
100
:CHIP
15K/OTHER (FROM P2)
R5146
100
:CHIP
Q5045
DTC144EKA
INV
C (1/5)
(R G B MATRIX)
B-551613<U/C>-C..

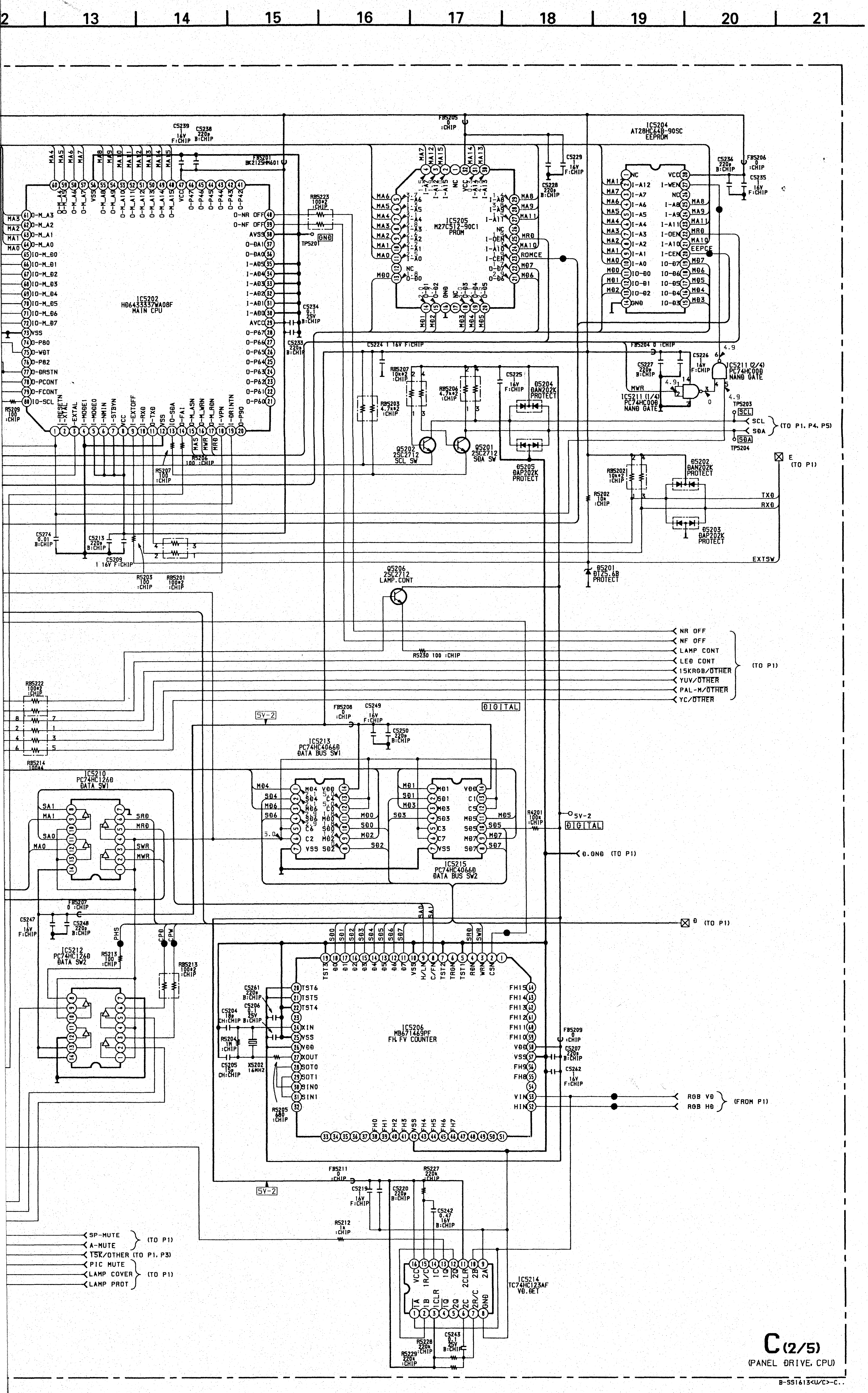
C (1/5) BOARD


①
1.3Vp-p (H)
②
1.3Vp-p (H)
③
2.8Vp-p (H)
④
0.8Vp-p (H)
⑤
0.6Vp-p (H)
⑥
0.6Vp-p (H)
⑦
0.7Vp-p (H)
⑧
0.7Vp-p (H)
⑨
0.8Vp-p (H)
⑩
3.4Vp-p (V)
⑪
3.4Vp-p (H)


4
5
6
7
8
9
10
11
12
13
14
5V-4
SUBSV
TP5202
SUBSV
IC5203
CY7C136-55JC
DUAL PORT RAM
IC5202
H06433337WA08F
MAIN CPU
IC5201
MM1170BFB
MAIN CPU WDT
IC5208
H6473257CP
DSO CPU
Q5205
2SC2712
RST LINE SW:CHIP
IC5207
CXD108-143Q
ADDRESS DECODER
IC5210
PC74HC126D
DATA SW1
IC5212
PC74HC126D
DATA SW2
Q5203
2SA1162
RST BUFFER
D5206
DAN202K
SP-MUTE
A-MUTE
TSK/OTHER (TO P1, P3)
PIC MUTE
LAMP COVER
LAMP PROT
(TO P1)
(TO P1)
B (TO P1)
C (TO P3)
BCLK
BBAT
BACLO
CCLK
CBAT
CGCS
SCLK
SBAT
SCTR
CGBSY
EEPCE
ROMCE
PHS
CPB
CPW


IC5208
HD6473257CP
OSD CPU
IC5209
MM1170BFB
OSD CPU WDT
IC5211 (4/4)
PC74HC00D
NAND GATE
IC5211 (3/4)
PC74HC00D
NAND GATE
Q5203
2SA1162
RST BUFFER
Q5204
DTC144EKA
INVERTER
Q5205
2SC2712
RST LINE SW
Q5206
DAN202K
X5201
19.66MHZ
S5201
(TO P1)
(TO P3) CG RESET
(TO P1) FAN CONT
(TO P1 P3 P4) SET RESET
(TO P1) POWER CONT
(FROM P1) V8
TEMP PROT
FAN PROT1
FAN PROT2
FILTER COVER
(TO P5)
BCLK
BBAT
BACL
B (TO P1)
C (TO P3)
MOSI
MISO
STCLK
EXTSEL1
EXTSEL2
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
1
2
3
4
5
6

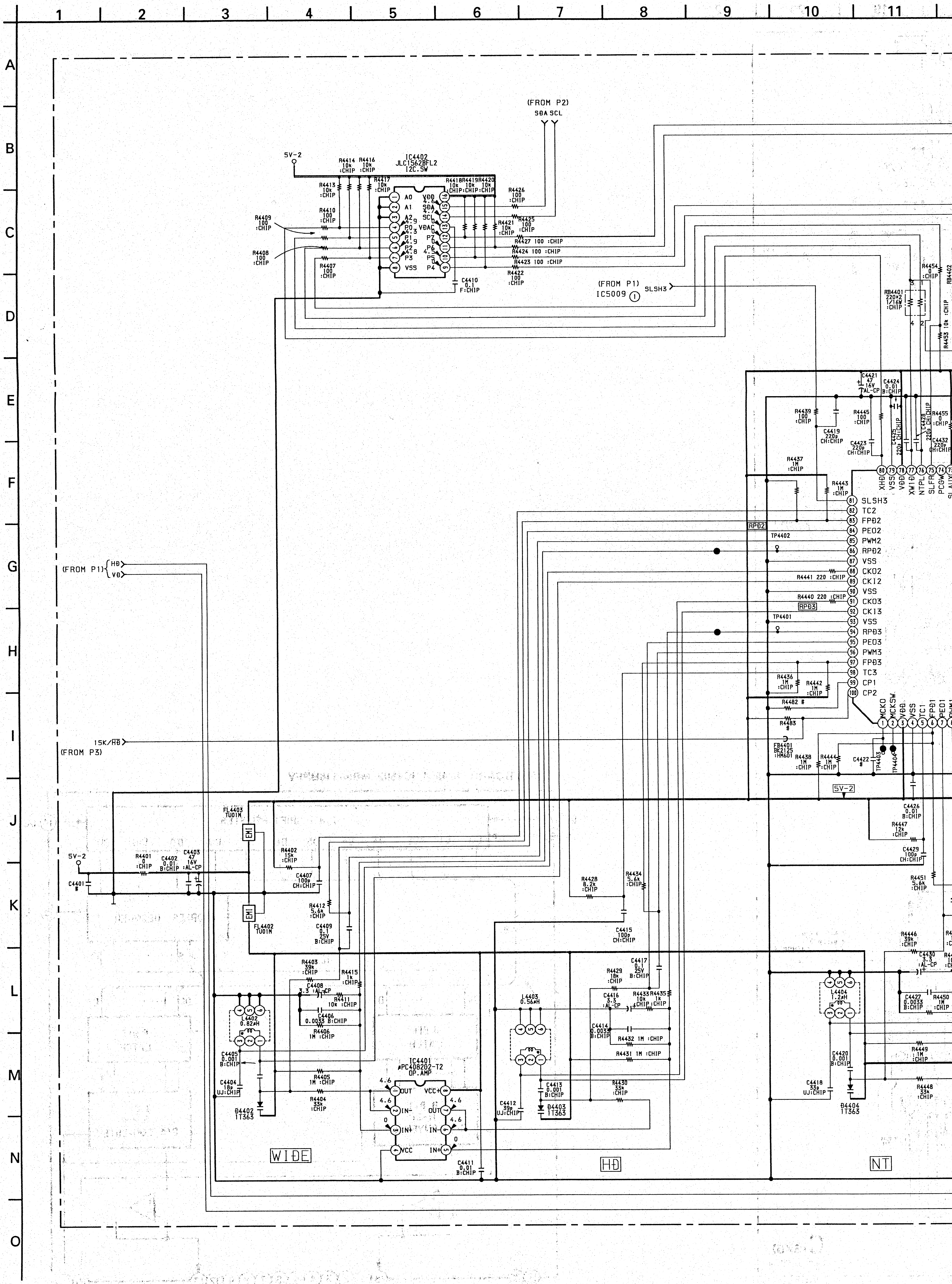

2
3
4
5
6
7
8
9
10
11
12
13
IC5209
MM1170BFB
OSD CPU WDT
IC5208
HD6473257CP
OSD CPU
IC5203
CY7C136-55JC
DUAL PORT RAM
IC5201
MM1170BFB
MAIN CPU WDT
IC5207
CXD108-143Q
ADDRESS DECODER
IC5210
PC74HC126D
DATA SW1
IC5212
PC74HC126D
DATA SW2
IC5211 (4/4)
PC74HC00D
NAND GATE
IC5211 (3/4)
PC74HC00D
NAND GATE
Q5205
2SC2712
RST LINE SW
Q5204
DTC144EKA
INVERTER
Q5203
2SA1162
RST BUFFER
Q5206
DAN202K
X5201
19.66MHz
5V-4
SUBSV
TP5202
STIO
STRST
MOSI
MISO
STCLK
RESET
(TO P1) FAN CONT
P1 P3 P4) SET RESET
(TO P1) POWER CONT
(FROM P1) VD
(TO P1)
TEMP PROT
FAN PROT1
FAN PROT2
FILTER COVER
(TO P5)
DCLK
DDAT
DACLD
B (TO P1)
C (TO P3)
SCLK
SDAT
SCTR
CCLK
CDAT
CDCS
SP-MUTE
A-MUTE
15K/OTHER (TO
PIC MUTE
LAMP COVER
LAMP PROT
EEPCE
ROMCE
CGBSY
EXFSEL
EXTSEL2
S5201

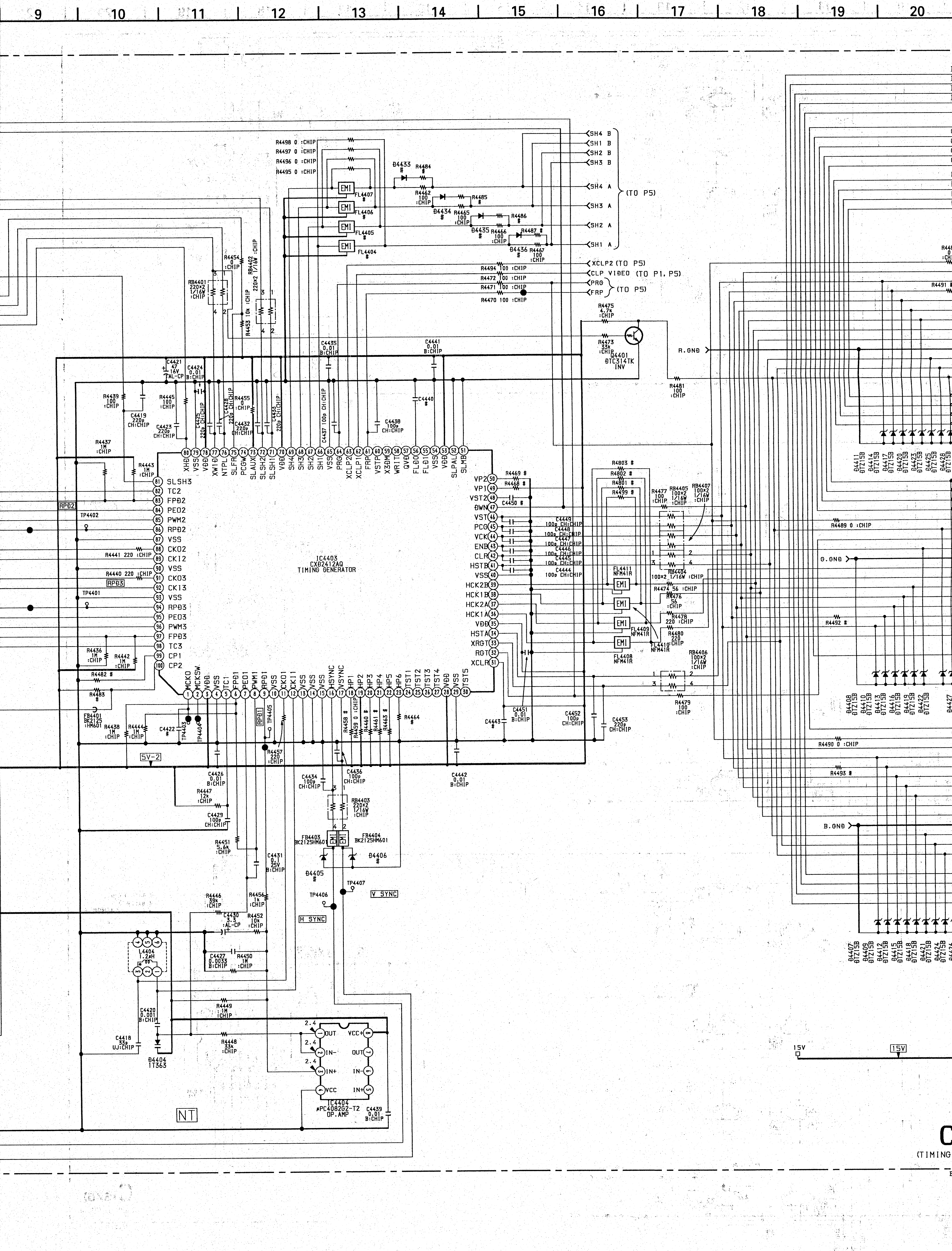


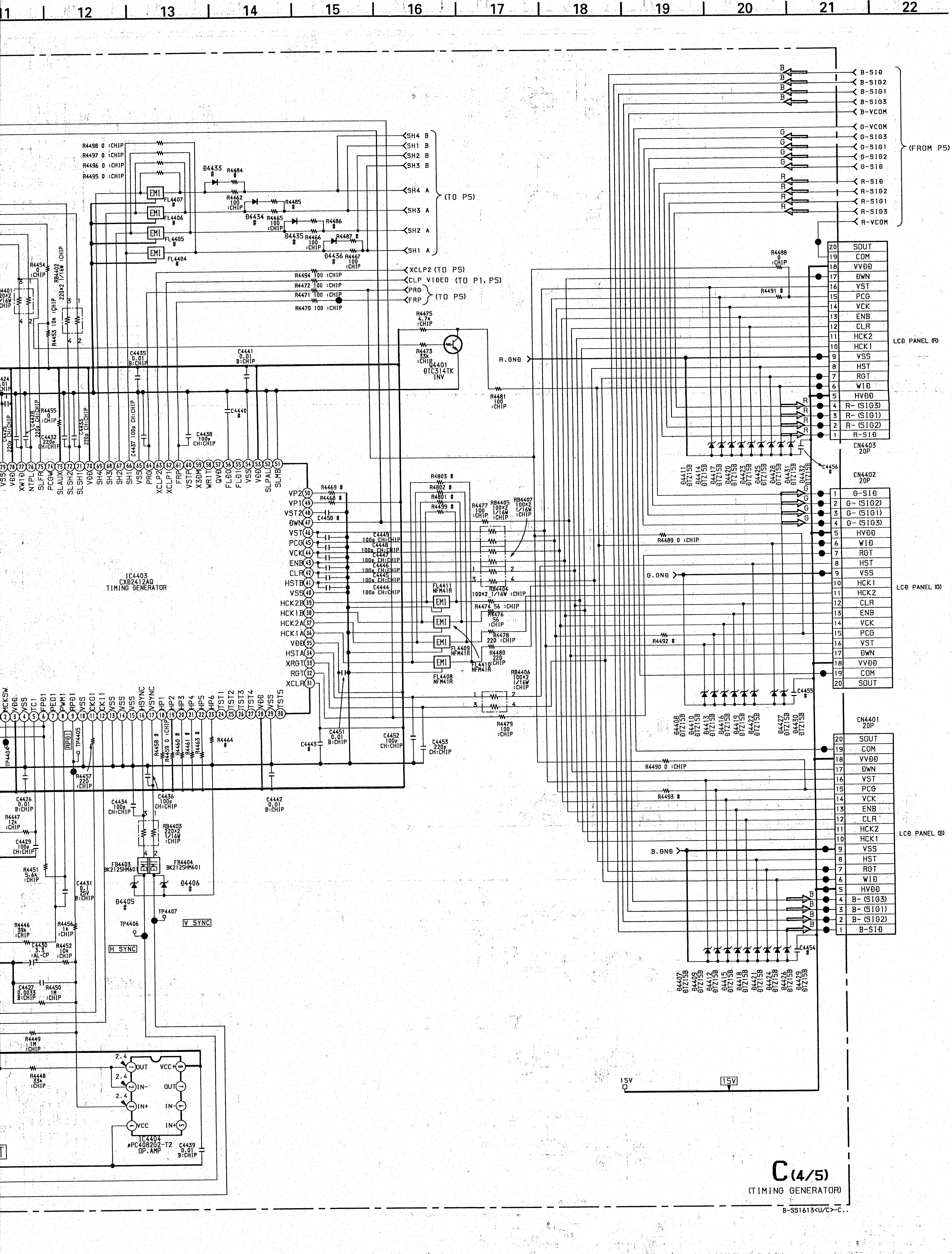
2
13
14
15
16
17
18
19
20
21
IC5202
HD6433337WA08F
MAIN CPU
IC5205
M27C512-90C1
PROM
IC5204
AT28HC64B-90SC
EEPROM
IC5211 (2/4)
PC74HC00D
NAND GATE
IC5211 (1/4)
PC74HC00D
NAND GATE
Q5202
2SC2712
SCL SW
Q5201
2SC2712
SDA SW
D5204
DAN202K
PROTECT
D5205
DAP202K
PROTECT
D5202
DAN202K
PROTECT
D5203
DAP202K
PROTECT
D5201
DTZ5.6B
PROTECT
Q5206
2SC2712
LAMP CONT
FB5201
BK2125HM601
FB5205
FB5204
FB5206
TP5201
TP5203
TP5204
SCL
SDA
(TO P1, P4, P5)
E
(TO P1)
TXD
RXD
EXTSW
NR OFF
NF OFF
LAMP CONT
LED CONT
15KRGB/OTHER
YUV/OTHER
PAL-M/OTHER
YC/OTHER
(TO P1)
R5230 100 :CHIP
DIGITAL
5V-2
IC5213
PC74HC4066D
DATA BUS SW1
IC5215
PC74HC4066D
DATA BUS SW2
IC5210
PC74HC126D
DATA SW1
IC5212
PC74HC126D
DATA SW2
D.GND (TO P1)
D (TO P1)
IC5206
MB671469PF
FH, FV COUNTER
X5202
16MHZ
RGB VD
RGB HD
(FROM P1)
IC5214
TC74HC123AF
VD.DET
SP-MUTE
A-MUTE
(TO P1)
15K/OTHER (TO P1, P3)
PIC MUTE
LAMP COVER
LAMP PROT
(TO P1)

C (2/5)
(PANEL DRIVE, CPU)

B-SS1613<U/C>-C..


(FROM P2)
SDA SCL
5V-2
IC4402
JLC1562BFL2
I2C.SW
R4414 10k :CHIP
R4416 10k :CHIP
R4417 10k :CHIP
R4413 10k :CHIP
R4410 100 :CHIP
R4409 100 :CHIP
R4408 100 :CHIP
R4407 100 :CHIP
R4418 10k :CHIP
R4419 10k :CHIP
R4420 10k :CHIP
R4426 100 :CHIP
R4421 10k :CHIP
R4425 100 :CHIP
R4427 100 :CHIP
R4424 100 :CHIP
R4423 100 :CHIP
R4422 100 :CHIP
C4410 0.1 F:CHIP
A0 A1 A2 P0 P1 P2 P3 VSS
VDD SDA SCL VDAC P7 P6 P5 P4
(FROM P1)
IC5009 ①
SLSH3
R4454 0 :CHIP
RB4401 220×2 1/16W :CHIP
R4453 10k :CHIP
RB4402
C4421 47 16V AL-CP
C4424 0.01 B:CHIP
R4439 100 :CHIP
R4445 100 :CHIP
C4419 220p CH:CHIP
C4423 220p CH:CHIP
C4425 220p CH:CHIP
C4428 220p CH:CHIP
R4455 0 :CHIP
C4432 220p CH:CHIP
R4437 1M :CHIP
R4443 1M :CHIP
XHD VSS VDD XW1D NTPL SLFR PCGW
80 79 78 77 76 75 74
81 SLSH3
82 TC2
83 FPD2
84 PEO2
85 PWM2
86 RPD2
87 VSS
88 CKO2
89 CKI2
90 VSS
91 CKO3
92 CKI3
93 VSS
94 RPD3
95 PEO3
96 PWM3
97 FPD3
98 TC3
99 CP1
100 CP2
RPD2
TP4402
R4441 220 :CHIP
R4440 220 :CHIP
RPD3
TP4401
R4436 1M :CHIP
R4442 1M :CHIP
R4482 #
R4483 #
MCKO MCKSW VDD VSS TC1 FPD1 PEO1
1 2 3 4 5 6 7
FB4401 BK2125 :HM601
R4438 1M :CHIP
R4444 1M :CHIP
C4422 #
TP4403
TP4404
5V-2
(FROM P1) HD VD
15K/HD
(FROM P3)
C4426 0.01 B:CHIP
R4447 12k :CHIP
C4429 100p CH:CHIP
R4451 5.6k :CHIP
FL4403 TU01M
FL4402 TU01M
EMI
5V-2
R4401 0 :CHIP
C4401 #
C4402 0.01 B:CHIP
C4403 47 16V AL-CP
R4402 15k :CHIP
C4407 100p CH:CHIP
R4412 5.6k :CHIP
C4409 0.1 25V B:CHIP
R4428 8.2k :CHIP
R4434 5.6k :CHIP
C4415 100p CH:CHIP
R4403 39k :CHIP
R4415 1k :CHIP
C4408 3.3 AL-CP
R4411 10k :CHIP
C4406 0.0033 B:CHIP
R4406 1M :CHIP
L4402 0.82μH
C4405 0.001 B:CHIP
C4404 18p UJ:CHIP
D4402 1T363
IC4401
μPC4082G2-T2
OP.AMP
R4405 1M :CHIP
R4404 33k :CHIP
OUT VCC IN- OUT IN+ IN- VCC IN+
4.6 4.6 0 4.6 4.6 0
WIDE
C4411 0.01 B:CHIP
L4403 0.56μH
C4412 39p UJ:CHIP
C4413 0.001 B:CHIP
D4403 1T363
HD
R4429 18k :CHIP
C4417 0.1 25V B:CHIP
C4416 3.3 AL-CP
R4433 10k :CHIP
R4435 1k :CHIP
C4414 0.0033 B:CHIP
R4432 1M :CHIP
R4431 1M :CHIP
R4430 33k :CHIP
L4404 1.2μH
C4420 0.001 B:CHIP
C4418 33p UJ:CHIP
D4404 1T363
NT
R4446 39k :CHIP
C4430 3.3 AL-CP
C4427 0.0033 B:CHIP
R4450 1M :CHIP
R4449 1M :CHIP
R4448 33k :CHIP
1 2 3 4 5 6 7 8 9 10 11
A B C D E F G H I J K L M N O

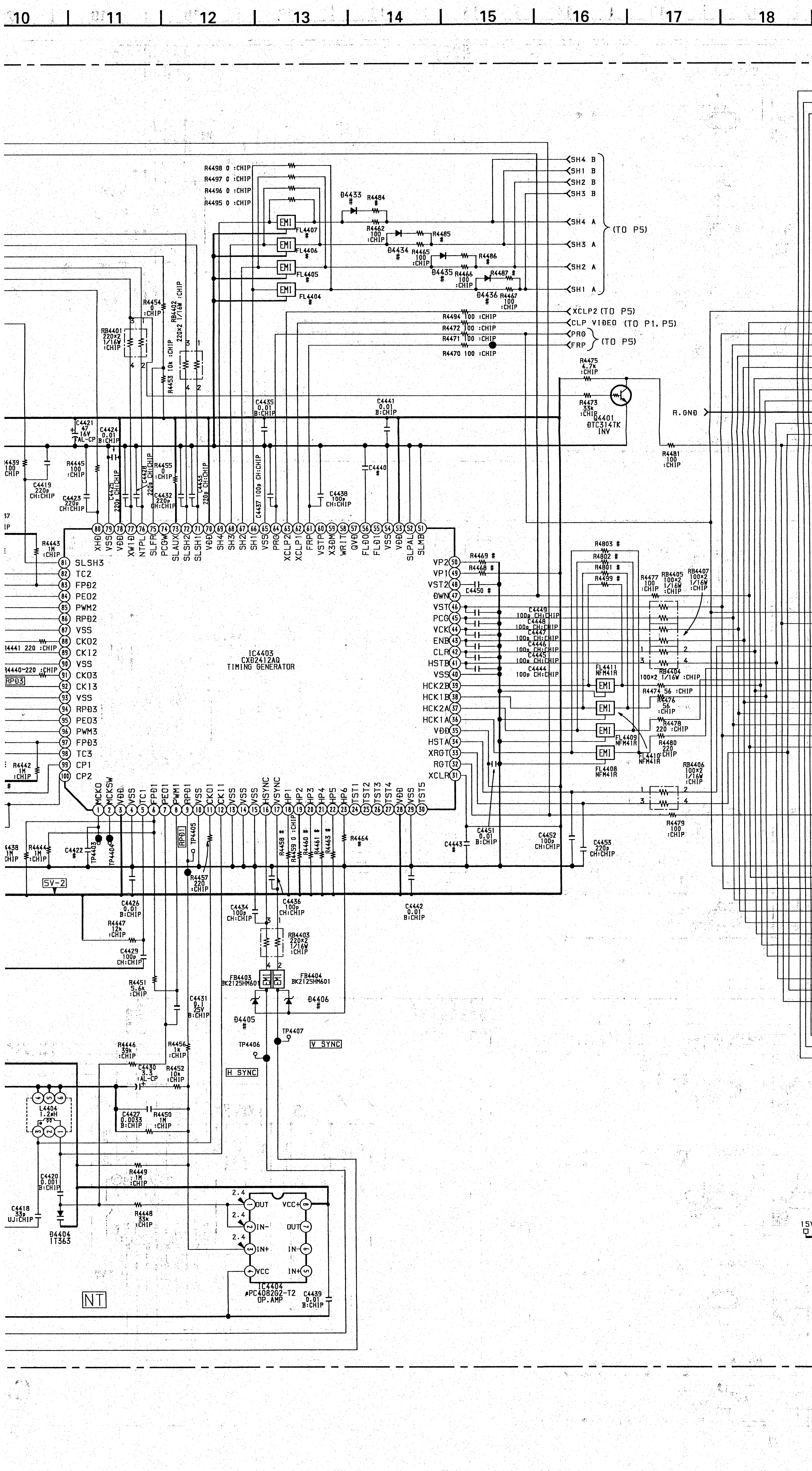

9
10
11
12
13
14
15
16
17
18
19
20
IC4403
CXD2412AQ
TIMING GENERATOR
IC4404
μPC4082G2-T2
OP.AMP
SH4 B
SH1 B
SH2 B
SH3 B
SH4 A
SH3 A
SH2 A
SH1 A
(TO P5)
XCLP2 (TO P5)
CLP VIDEO (TO P1, P5)
PRG
FRP
(TO P5)
R.GND
G.GND
B.GND
Q4401
DTC314TK
INV
FL4404
FL4405
FL4406
FL4407
FL4408
NFM41R
FL4409
NFM41R
FL4410
NFM41R
FL4411
NFM41R
EMI
RB4401
RB4402
RB4403
RB4404
RB4405
RB4406
RB4407
FB4401
BK2125
:HM601
FB4403
BK2125HM601
FB4404
BK2125HM601
L4404
1.2μH
D4404
1T363
D4405
D4406
D4433
D4434
D4435
D4436
TP4401
TP4402
TP4403
TP4404
TP4405
TP4406
TP4407
H SYNC
V SYNC
5V-2
NT
RPD2
RPD3
RPD1
15V
SLSH3
TC2
FPD2
PEO2
PWM2
RPD2
VSS
CKO2
CK12
VSS
CKO3
CK13
VSS
RPD3
PEO3
PWM3
FPD3
TC3
CP1
CP2
XHD
VSS
VDD
XWID
NTPL
SLFR
PCGW
SLAUX
SLSH2
SLSH1
VDD
SH4
SH3
SH2
SH1
VSS
PRG
XCLP2
XCLP1
FRP
VSTPC
X3DMX
WRITE
QVD
FLDO
FLDI
VSS
VDD
SLPAL
SLMB
VP2
VP1
VST2
DWN
VST
PCG
VCK
ENB
CLR
HSTB
VSS
HCK2B
HCK1B
HCK2A
HCK1A
VDD
HSTA
XRGT
RGT
XCLR
MCKO
MCKSW
VSS
VSS
TC1
FPD1
PEO1
PWM1
RPD1
VSS
CKO1
CK11
VSS
VSS
VSS
HSYNC
VSYNC
HP1
HP2
HP3
HP4
HP5
HP6
TST1
TST2
TST3
TST4
VDD
VSS
TST5
OUT
IN-
IN+
VCC
VCC+
OUT
IN-
IN+
R4498 0 :CHIP
R4497 0 :CHIP
R4496 0 :CHIP
R4495 0 :CHIP
R4494 100 :CHIP
R4472 100 :CHIP
R4471 100 :CHIP
R4470 100 :CHIP
R4475 4.7k :CHIP
R4473 33k :CHIP
R4481 100 :CHIP
R4489 0 :CHIP
R4490 0 :CHIP
R4441 220 :CHIP
R4440 220 :CHIP
C4441 0.01 B:CHIP
C4435 0.01 B:CHIP
C4421 47 16V AL-CP
C4424 0.01 B:CHIP
C4440
C4438 100p CH:CHIP
C4449 100p CH:CHIP
C4450
C4451 0.01 B:CHIP
C4452 100p CH:CHIP
C4453 220p CH:CHIP
C4426 0.01 B:CHIP
C4429 100p CH:CHIP
C4434 100p CH:CHIP
C4436 100p CH:CHIP
C4442 0.01 B:CHIP
C4431 0.1 25V B:CHIP
C4430 3.3 AL-CP
C4427 0.0033 B:CHIP
C4420 0.001 B:CHIP
C4418 33p UJ:CHIP
C4439 0.01 B:CHIP
R4447 12k :CHIP
R4451 5.6k :CHIP
R4446 39k :CHIP
R4456 1k :CHIP
R4452 10k :CHIP
R4450 1M :CHIP
R4449 1M :CHIP
R4448 33k :CHIP
R4457 220 :CHIP
R4479 100 :CHIP
R4478 220 :CHIP
R4480 220 :CHIP
R4474 56 :CHIP
R4476 56 :CHIP
R4477 100 :CHIP
DTZ15B


11
12
13
14
15
16
17
18
19
20
21
22
B-SIθ
B-SIG2
B-SIG1
B-SIG3
B-VCOM
G-VCOM
G-SIG3
G-SIG1
G-SIG2
G-SIθ
R-SIθ
R-SIG2
R-SIG1
R-SIG3
R-VCOM
(FROM P5)
SH4 B
SH1 B
SH2 B
SH3 B
SH4 A
SH3 A
SH2 A
SH1 A
(TO P5)
XCLP2 (TO P5)
CLP VIDEO (TO P1, P5)
PRG
FRP
(TO P5)
R4498 0 :CHIP
R4497 0 :CHIP
R4496 0 :CHIP
R4495 0 :CHIP
FL4407
FL4406
FL4405
FL4404
EMI
θ4433
R4484
R4462 100 :CHIP
R4485
θ4434
R4465 100 :CHIP
R4486
θ4435
R4466 100 :CHIP
R4487
θ4436
R4467 100 :CHIP
R4494 100 :CHIP
R4472 100 :CHIP
R4471 100 :CHIP
R4470 100 :CHIP
R4454 0 :CHIP
RB4402 220×2 1/16W :CHIP
R4453 10k :CHIP
R4475 4.7k :CHIP
R4473 33k :CHIP
Q4401 θTC314TK INV
R.GNθ
R4481 100 :CHIP
C4435 0.01 B:CHIP
C4441 0.01 B:CHIP
C4440
C4438 100p CH:CHIP
C4437 100p CH:CHIP
R4455 0 :CHIP
C4428 220p CH:CHIP
C4432 220p CH:CHIP
C4433 220p CH:CHIP
C4425 220p CH:CHIP
R4488 0 :CHIP
R4491
CN4403 20P
LCθ PANEL (R)
SOUT
COM
VVθθ
θWN
VST
PCG
VCK
ENB
CLR
HCK2
HCK1
VSS
HST
RGT
WIθ
HVθθ
R- (SIG3)
R- (SIG1)
R- (SIG2)
R-SIθ
C4456
θ4411 θTZ15B
θ4414 θTZ15B
θ4417 θTZ15B
θ4420 θTZ15B
θ4423 θTZ15B
θ4425 θTZ15B
θ4428 θTZ15B
θ4431 θTZ15B
θ4432 θTZ15B
VSS XWIθ NTPL SLFR PCGW SLAUX SLSH2 SLSH1 VDD SH4 SH3 SH2 SH1 VSS PRG XCLP2 XCLP1 FRP VSTP X3θM WRIT QVθ FLθ0 FLθ1 VSS VDD SLPAL SLMB
VP2 VP1 VST2 θWN VST PCG VCK ENB CLR HSTB VSS HCK2B HCK1B HCK2A HCK1A VDD HSTA XRGT RGT XCLR
IC4403 CXB2412AQ TIMING GENERATOR
R4469
R4468
C4450
C4449 100p CH:CHIP
C4448 100p CH:CHIP
C4447 100p CH:CHIP
C4446 100p CH:CHIP
C4445 100p CH:CHIP
C4444 100p CH:CHIP
R4803
R4802
R4801
R4499
R4477 100 :CHIP
RB4405 100×2 1/16W :CHIP
RB4407 100×2 1/16W :CHIP
RB4404 100×2 1/16W :CHIP
FL4411 NFM41R
FL4409 NFM41R
FL4410 NFM41R
FL4408 NFM41R
R4474 56 :CHIP
R4476 56 :CHIP
R4478 220 :CHIP
R4480 220 :CHIP
RB4406 100×2 1/16W :CHIP
R4479 100 :CHIP
C4451 0.01 B:CHIP
C4443
C4452 100p CH:CHIP
C4453 220p CH:CHIP
R4489 0 :CHIP
G.GNθ
R4492
CN4402 20P
G-SIθ
G- (SIG2)
G- (SIG1)
G- (SIG3)
LCθ PANEL (G)
C4455
θ4408 θTZ15B
θ4410 θTZ15B
θ4413 θTZ15B
θ4416 θTZ15B
θ4419 θTZ15B
θ4422 θTZ15B
θ4427 θTZ15B
θ4430 θTZ15B
MCKSW VDD VSS TC1 FPO1 PEO1 PWM1 RPθ1 VSS CKO1 CKI1 VSS VSS HSYNC VSYNC HP1 HP2 HP3 HP4 HP5 HP6 TST1 TST2 TST3 TST4 VDD VSS TST5
RPθ1
TP4405
TP4404
R4457 220 :CHIP
R4458
R4459 0 :CHIP
R4460
R4461
R4463
R4464
C4426 0.01 B:CHIP
R4447 12k :CHIP
C4429 100p CH:CHIP
R4451 5.6k :CHIP
C4431 0.1 25V B:CHIP
R4446 39k :CHIP
R4456 1k :CHIP
C4430 3.3 :AL-CP
R4452 10k :CHIP
C4427 0.0033 B:CHIP
R4450 1M :CHIP
C4434 100p CH:CHIP
C4436 100p CH:CHIP
RB4403 220×2 1/16W :CHIP
FB4403 BK2125HM601
FB4404 BK2125HM601
θ4405
θ4406
TP4406
TP4407
H SYNC
V SYNC
C4442 0.01 B:CHIP
R4490 0 :CHIP
R4493
CN4401 20P
B.GNθ
LCθ PANEL (B)
B- (SIG3)
B- (SIG1)
B- (SIG2)
B-SIθ
C4454
θ4407 θTZ15B
θ4409 θTZ15B
θ4412 θTZ15B
θ4415 θTZ15B
θ4418 θTZ15B
θ4421 θTZ15B
θ4424 θTZ15B
θ4426 θTZ15B
θ4429 θTZ15B
R4449 1M :CHIP
R4448 33k :CHIP
2.4
OUT
IN-
IN+
VCC
VCC+
IC4404 μPC4082G2-T2 OP.AMP
C4439 0.01 B:CHIP
15V

C(4/5)

(TIMING GENERATOR)

B-SS1613<U/C>-C..



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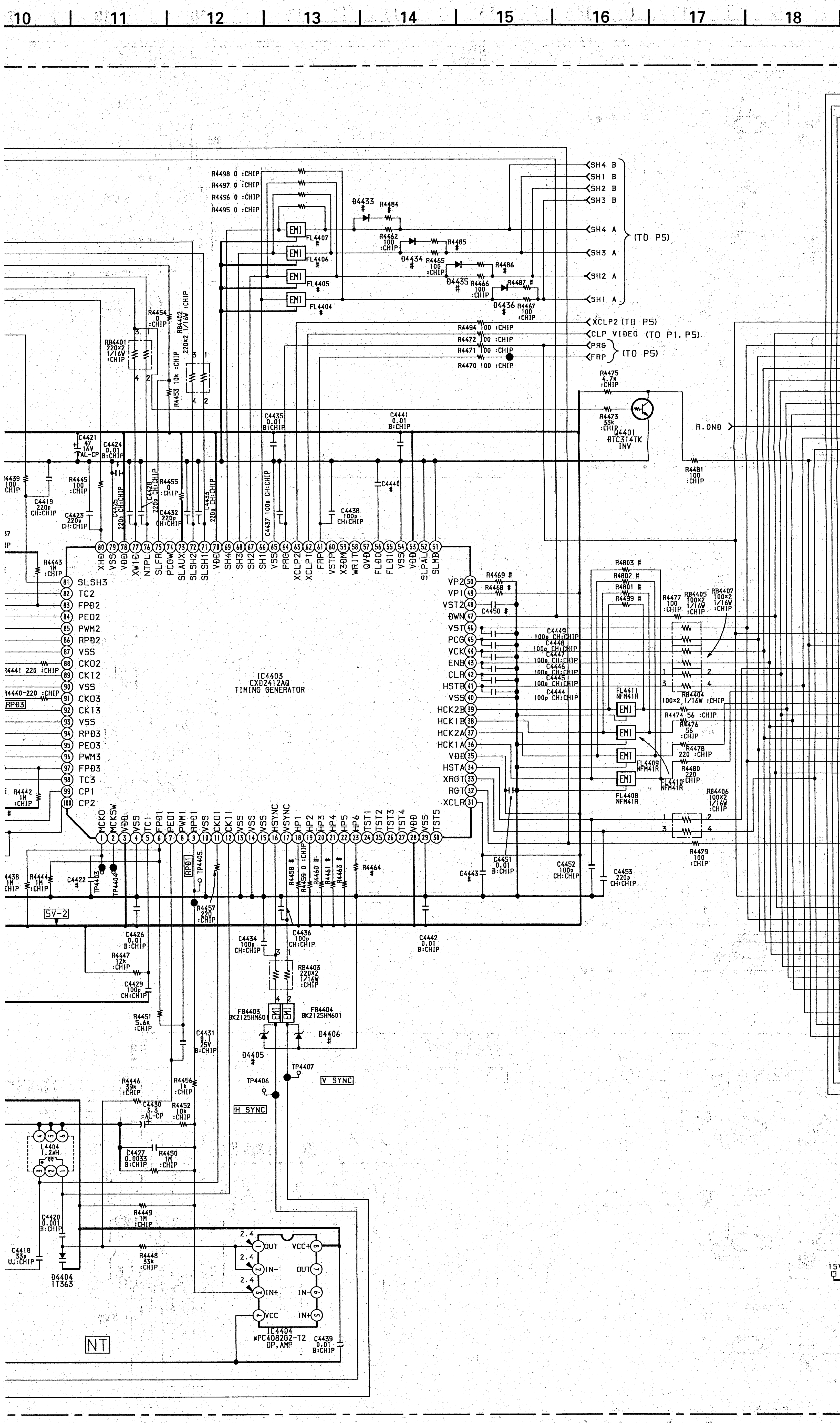
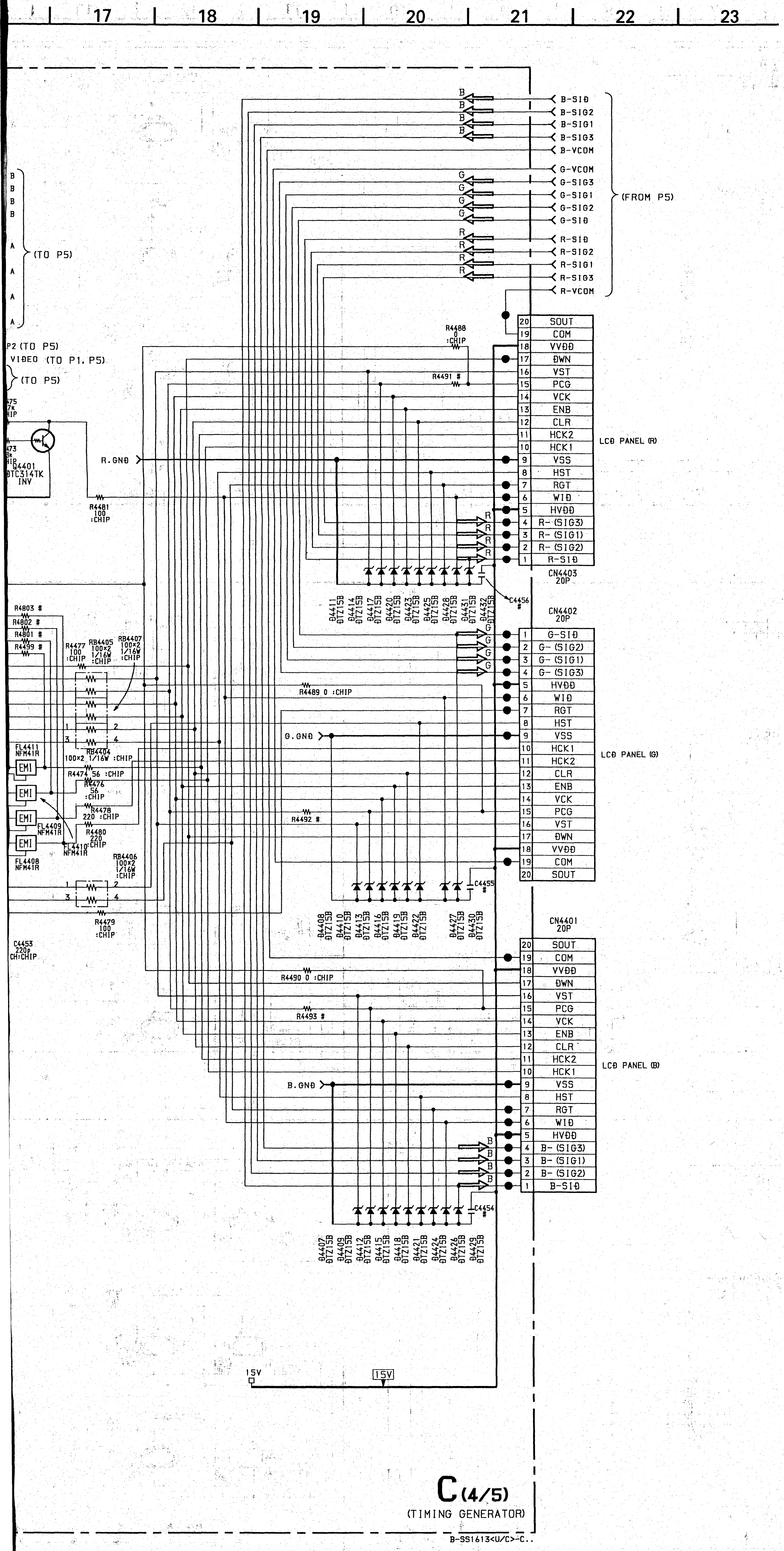
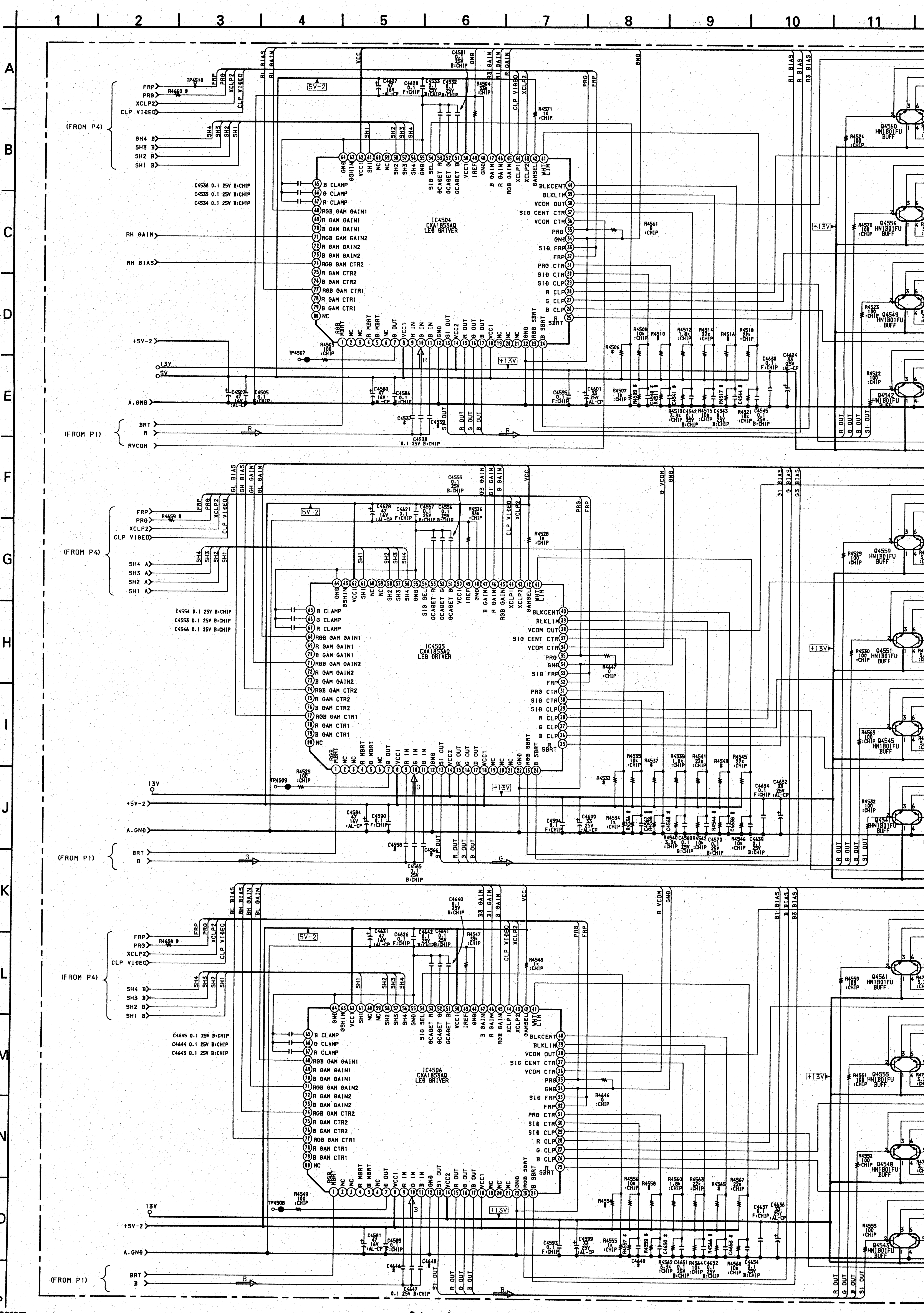
11
12
13
14
15
16
17
18
R4498 0 :CHIP
R4497 0 :CHIP
R4496 0 :CHIP
R4495 0 :CHIP
EMI
FL4407
FL4406
FL4405
FL4404
D4433
R4484
R4462 100 :CHIP
R4485
D4434
R4465 100 :CHIP
R4486
D4435
R4466 100 :CHIP
R4487
D4436
R4467 100 :CHIP
SH4 B
SH1 B
SH2 B
SH3 B
SH4 A
SH3 A
SH2 A
SH1 A
(TO P5)
XCLP2 (TO P5)
CLP VIDEO (TO P1, P5)
PRG
FRP
(TO P5)
R4494 100 :CHIP
R4472 100 :CHIP
R4471 100 :CHIP
R4470 100 :CHIP
R4475 4.7k :CHIP
R4473 33k :CHIP
Q4401 DTC314TK INV
R.GND
R4481 100 :CHIP
R4454 0 :CHIP
RB4402 220×2 1/16W :CHIP
RB4401 220×2 1/16W :CHIP
R4453 10k :CHIP
C4435 0.01 B:CHIP
C4441 0.01 B:CHIP
C4421 47 16V AL-CP
C4424 0.01 B:CHIP
R4439 100 :CHIP
C4419 220p CH:CHIP
R4445 100 :CHIP
C4423 220p CH:CHIP
C4425 220p CH:CHIP
C4428 220p CH:CHIP
R4455 :CHIP
C4432 220p CH:CHIP
C4433 220p CH:CHIP
C4437 100p CH:CHIP
C4438 100p CH:CHIP
C4440
R4443 1M :CHIP
XHD VSS VDD XWID NTPL SLFR PCGW SLAUX SLSH2 SLSH1 VDD SH4 SH3 SH2 SH1 VSS PRG XCLP2 XCLP1 FRP VSTP WRIT QVD FLDO FLDI VSS VDD SLPAL SLMD
SLSH3
TC2
FPD2
PEO2
PWM2
RPD2
VSS
CKO2
CKI2
VSS
CKO3
CKI3
VSS
RPD3
PEO3
PWM3
FPD3
TC3
CP1
CP2
R4441 220 :CHIP
R4440 220 :CHIP
RPD3
R4442 1M :CHIP
IC4403 CXD2412AQ TIMING GENERATOR
VP2
VP1
VST2
DWN
VST
PCG
VCK
ENB
CLR
HSTB
VSS
HCK2B
HCK1B
HCK2A
HCK1A
VDD
HSTA
XRGT
RGT
XCLR
R4469
R4468
C4450
C4449 100p CH:CHIP
C4448 100p CH:CHIP
C4447 100p CH:CHIP
C4446 100p CH:CHIP
C4445 100p CH:CHIP
C4444 100p CH:CHIP
R4803
R4802
R4801
R4499
R4477 100 :CHIP
RB4405 100×2 1/16W :CHIP
RB4407 100×2 1/16W :CHIP
RB4404 100×2 1/16W :CHIP
FL4411 NFM41R
FL4409 NFM41R
FL4410 NFM41R
FL4408 NFM41R
R4474 56 :CHIP
R4476 56 :CHIP
R4478 220 :CHIP
R4480 220 :CHIP
RB4406 100×2 1/16W :CHIP
R4479 100 :CHIP
MCKO MCKSW VDD VSS TC1 FPD1 PEO1 PWM1 RPD1 CKO1 CKI1 VSS VSS HSYNC VSYNC HP1 HP2 HP3 HP4 HP5 HP6 TST1 TST2 TST3 TST4 VDD VSS TST5
R4438 1M :CHIP
R4444 1M :CHIP
C4422
TP4403
TP4404
RPD1
TP4405
R4458
R4459 0 :CHIP
R4460
R4461
R4463
R4464
C4443
C4451 0.01 B:CHIP
C4452 100p CH:CHIP
C4453 220p CH:CHIP
5V-2
R4457 220 :CHIP
C4426 0.01 B:CHIP
R4447 12k :CHIP
C4429 100p CH:CHIP
C4434 100p CH:CHIP
C4436 100p CH:CHIP
RB4403 220×2 1/16W :CHIP
C4442 0.01 B:CHIP
FB4403 BK2125HM601
FB4404 BK2125HM601
D4405
D4406
R4451 5.6k :CHIP
C4431 0.1 25V B:CHIP
TP4407
V SYNC
TP4406
H SYNC
R4446 39k :CHIP
R4456 1k :CHIP
C4430 3.3 AL-CP
R4452 10k :CHIP
L4404 1.2μH
C4427 0.0033 B:CHIP
R4450 1M :CHIP
R4449 1M :CHIP
C4420 0.001 B:CHIP
C4418 33p UJ:CHIP
D4404 1T363
R4448 33k :CHIP
2.4
OUT
IN-
IN+
VCC
VCC+
IC4404 μPC4082G2-T2 OP.AMP
C4439 0.01 B:CHIP
NT


10
11
12
13
14
15
16
17
18
R4498 0 :CHIP
R4497 0 :CHIP
R4496 0 :CHIP
R4495 0 :CHIP
EMI
FL4407 #
FL4406 #
FL4405 #
FL4404 #
D4433 #
R4484 #
R4462 100 :CHIP
D4434 #
R4485 #
R4465 100 :CHIP
R4486 #
D4435 #
R4466 100 :CHIP
R4487 #
D4436 #
R4467 100 :CHIP
SH4 B
SH1 B
SH2 B
SH3 B
SH4 A
SH3 A
SH2 A
SH1 A
(TO P5)
R4494 100 :CHIP
R4472 100 :CHIP
R4471 100 :CHIP
R4470 100 :CHIP
XCLP2 (TO P5)
CLP VIDEO (TO P1, P5)
PRG
FRP
(TO P5)
R4475 4.7k :CHIP
R4473 33k :CHIP
Q4401 DTC314TK INV
R.GND
R4481 100 :CHIP
R4454 0 :CHIP
RB4401 220×2 1/16W :CHIP
RB4402 220×2 1/16W :CHIP
R4453 10k :CHIP
C4435 0.01 B:CHIP
C4441 0.01 B:CHIP
C4421 47 16V AL-CP
C4424 0.01 B:CHIP
R4439 100 CHIP
C4419 220p CH:CHIP
R4445 100 :CHIP
C4423 220p CH:CHIP
C4425 220p CH:CHIP
C4428 220p CH:CHIP
R4455 0 :CHIP
C4432 220p CH:CHIP
C4433 220p CH:CHIP
C4437 100p CH:CHIP
C4438 100p CH:CHIP
C4440 #
R4443 1M :CHIP
XHD
VSS
VDD
XWID
NTPL
SLFR
PCGW
SLAUX
SLSH2
SLSH1
VDD
SH4
SH3
SH2
SH1
VSS
PRG
XCLP2
XCLP1
FRP
VSTP
X3DM
WRIT
QVD
FLD0
FLD1
VSS
VDD
SLPAL
SLMB
SLSH3
TC2
FPD2
PE02
PWM2
RPD2
VSS
CK02
CKI2
VSS
CK03
CKI3
VSS
RPD3
PE03
PWM3
FPD3
TC3
CP1
CP2
R4441 220 :CHIP
R4440 220 :CHIP
RPD3
R4442 1M :CHIP
IC4403
CXD2412AQ
TIMING GENERATOR
VP2
VP1
VST2
DWN
VST
PCG
VCK
ENB
CLR
HSTB
VSS
HCK2B
HCK1B
HCK2A
HCK1A
VDD
HSTA
XRGT
RGT
XCLR
R4469 #
R4468 #
C4450 #
C4449 100p CH:CHIP
C4448 100p CH:CHIP
C4447 100p CH:CHIP
C4446 100p CH:CHIP
C4445 100p CH:CHIP
C4444 100p CH:CHIP
R4803 #
R4802 #
R4801 #
R4499 #
R4477 100 :CHIP
RB4405 100×2 1/16W :CHIP
RB4407 100×2 1/16W :CHIP
RB4404 100×2 1/16W :CHIP
FL4411 NFM41R
R4474 56 :CHIP
R4476 56 :CHIP
R4478 220 :CHIP
FL4409 NFM41R
R4480 220 :CHIP
FL4410 NFM41R
FL4408 NFM41R
RB4406 100×2 1/16W :CHIP
R4479 100 :CHIP
MCKO
MCKSW
VDD
VSS
TC1
FPD1
PE01
PWM1
RPD1
VSS
CK01
CKI1
VSS
VSS
VSS
HSYNC
VSYNC
HP1
HP2
HP3
HP4
HP5
HP6
TST1
TST2
TST3
TST4
VDD
VSS
TST5
R4438 1M CHIP
R4444 1M :CHIP
C4422 #
TP4403
TP4404
5V-2
RPD1
TP4405
R4457 220 :CHIP
R4458 #
R4459 0 :CHIP
R4460 #
R4461 #
R4463 #
R4464 #
C4443 #
C4451 0.01 B:CHIP
C4452 100p CH:CHIP
C4453 220p CH:CHIP
C4442 0.01 B:CHIP
C4426 0.01 B:CHIP
R4447 12k :CHIP
C4429 100p CH:CHIP
C4434 100p CH:CHIP
C4436 100p CH:CHIP
RB4403 220×2 1/16W :CHIP
FB4403 BK2125HM601
FB4404 BK2125HM601
D4405 #
D4406 #
TP4406
TP4407
V SYNC
H SYNC
R4451 5.6k :CHIP
C4431 0.1 25V B:CHIP
R4446 39k :CHIP
R4456 1k :CHIP
C4430 3.3 :AL-CP
R4452 10k :CHIP
C4427 0.0033 B:CHIP
R4450 1M :CHIP
L4404 1.2µH
R4449 1M :CHIP
C4420 0.001 B:CHIP
C4418 33p UJ:CHIP
D4404 1T363
R4448 33k :CHIP
2.4
OUT
IN-
IN+
VCC
VCC+
OUT
IN-
IN+
IC4404
µPC4082G2-T2
OP.AMP
C4439 0.01 B:CHIP
NT


17
18
19
20
21
22
23
B-SIG
B-SIG2
B-SIG1
B-SIG3
B-VCOM
G-VCOM
G-SIG3
G-SIG1
G-SIG2
G-SIG
R-SIG
R-SIG2
R-SIG1
R-SIG3
R-VCOM
(FROM P5)
(TO P5)
P2 (TO P5)
VIDEO (TO P1, P5)
(TO P5)
Q4401
DTC314TK
INV
R.GND
R4481
100
:CHIP
R4488
0
:CHIP
R4491 #
SOUT
COM
VVDD
DWN
VST
PCG
VCK
ENB
CLR
HCK2
HCK1
VSS
HST
RGT
WID
HVDD
R-(SIG3)
R-(SIG1)
R-(SIG2)
R-SIG
LCD PANEL (R)
CN4403
20P
C4456
#
D4411 DTZ15B
D4414 DTZ15B
D4417 DTZ15B
D4420 DTZ15B
D4423 DTZ15B
D4425 DTZ15B
D4428 DTZ15B
D4431 DTZ15B
D4432 DTZ15B
CN4402
20P
G-SIG
G-(SIG2)
G-(SIG1)
G-(SIG3)
LCD PANEL (G)
R4803 #
R4802 #
R4801 #
R4499 #
R4477
100
:CHIP
RB4405
100×2
1/16W
:CHIP
RB4407
100×2
1/16W
:CHIP
RB4404
100×2 1/16W :CHIP
R4474 56 :CHIP
R4476
56
:CHIP
R4478
220 :CHIP
R4480
220
:CHIP
FL4411
NFM41R
FL4409
NFM41R
FL4410
NFM41R
FL4408
NFM41R
EMI
RB4406
100×2
1/16W
:CHIP
R4479
100
:CHIP
C4453
220p
CH:CHIP
R4489 0 :CHIP
G.GND
R4492 #
C4455
#
D4408 DTZ15B
D4410 DTZ15B
D4413 DTZ15B
D4416 DTZ15B
D4419 DTZ15B
D4422 DTZ15B
D4427 DTZ15B
D4430 DTZ15B
CN4401
20P
R4490 0 :CHIP
R4493 #
B.GND
B-(SIG3)
B-(SIG1)
B-(SIG2)
B-SIG
LCD PANEL (B)
C4454
#
D4407 DTZ15B
D4409 DTZ15B
D4412 DTZ15B
D4415 DTZ15B
D4418 DTZ15B
D4421 DTZ15B
D4424 DTZ15B
D4426 DTZ15B
D4429 DTZ15B
15V
15V
C (4/5)
(TIMING GENERATOR)
B-SS1613<U/C>-C..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A
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C
D
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F
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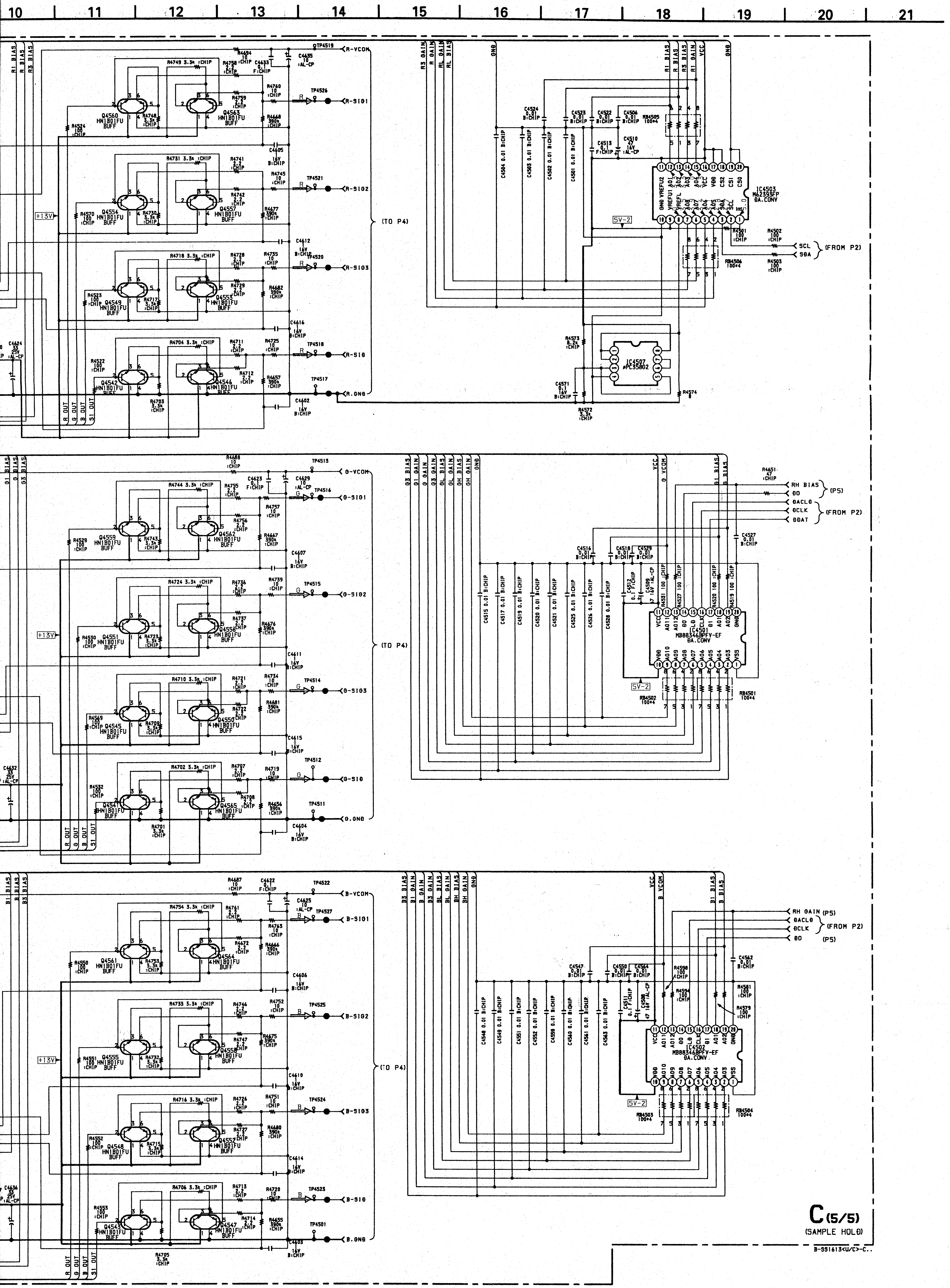
H
I
J
K
L
M
N
O
P
(FROM P4)
FRP
PRG
XCLP2
CLP VIDEO
SH4 B
SH3 B
SH2 B
SH1 B
RH GAIN
RH BIAS
+5V-2
13V
5V
A.GND
(FROM P1)
BRT
R
RVCOM
IC4504
CXA1853AQ
LED DRIVER
SH4 A
SH3 A
SH2 A
SH1 A
G
IC4505
CXA1853AQ
LED DRIVER
B
IC4506
CXA1853AQ
LED DRIVER
5V-2
+13V
B CLAMP
G CLAMP
R CLAMP
RGB GAM GAIN1
R GAM GAIN1
B GAM GAIN1
RGB GAM GAIN2
R GAM GAIN2
B GAM GAIN2
RGB GAM CTR2
R GAM CTR2
B GAM CTR2
RGB GAM CTR1
R GAM CTR1
B GAM CTR1
NC
BLKCENT
BLKLIM
VCOM OUT
SIG CENT CTR
VCOM CTR
PRG
GND
SIG FRP
FRP
PRG CTR
SIG CTR
SIG CLP
R CLP
G CLP
B CLP
SBRT
R OUT
G OUT
B OUT
S1 OUT
Q4560
HN1B01FU
BUFF
Q4554
HN1B01FU
BUFF
Q4549
HN1B01FU
BUFF
Q4542
HN1B01FU
BUFF
Q4559
HN1B01FU
BUFF
Q4551
HN1B01FU
BUFF
Q4545
HN1B01FU
BUFF
Q4541
HN1B01FU
BUFF
Q4561
HN1B01FU
BUFF
Q4555
HN1B01FU
BUFF
Q4548
HN1B01FU
BUFF
Q4543
HN1B01FU
BUFF
TP4510
TP4507
TP4509
TP4508

Schematic diagram
C (5/5) board ➡


10
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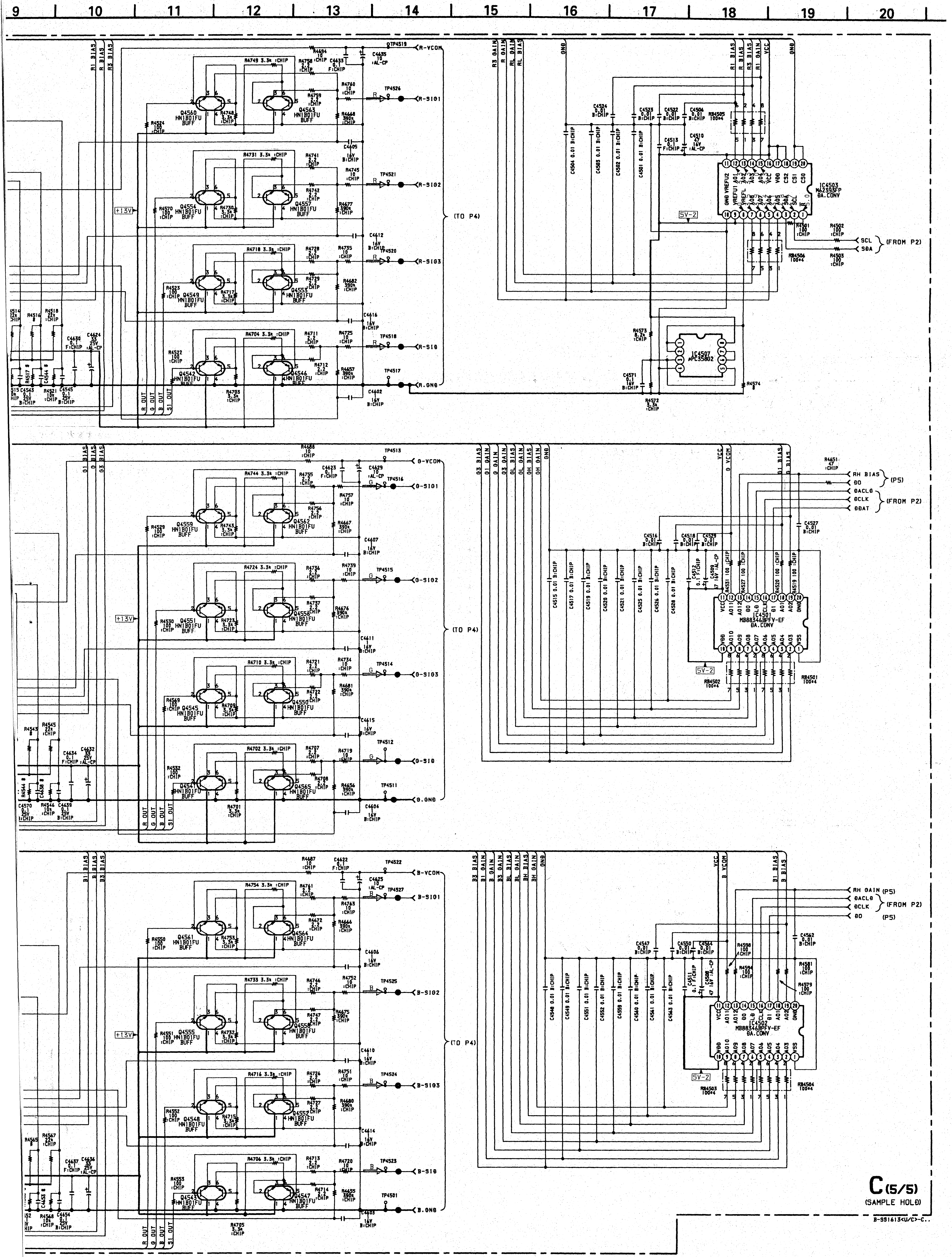
19
20
21
R1 BIAS
R BIAS
R3 BIAS
R-VCOM
R-SIG1
R-SIG2
R-SIG3
R-SIG
R.GND
(TO P4)
+13V
R OUT
G OUT
B OUT
S1 OUT
HN1B01FU
BUFF
R3 GAIN
R GAIN
RL GAIN
RL BIAS
GND
VCC
IC4503
M62393FP
8A.CONV
SCL
SDA
(FROM P2)
5V-2
IC4507
μPC358G2
G1 BIAS
G BIAS
G3 BIAS
G-VCOM
G-SIG1
G-SIG2
G-SIG3
G-SIG
G.GND
G3 BIAS
G1 GAIN
G GAIN
G3 GAIN
GL GAIN
GL BIAS
GH BIAS
G VCOM
RH BIAS
GD
GACLD
GCLK
GDAT
(P5)
IC4501
MB88346BPFV-EF
8A.CONV
RB4501
RB4502
B1 BIAS
B BIAS
B3 BIAS
B-VCOM
B-SIG1
B-SIG2
B-SIG3
B-SIG
B.GND
B GAIN
BL GAIN
BL BIAS
BH BIAS
B VCOM
RH GAIN
IC4502
MB88346BPFV-EF
8A.CONV
RB4503
RB4504
C(5/5)
(SAMPLE HOLD)
B-551613<U/C>-C..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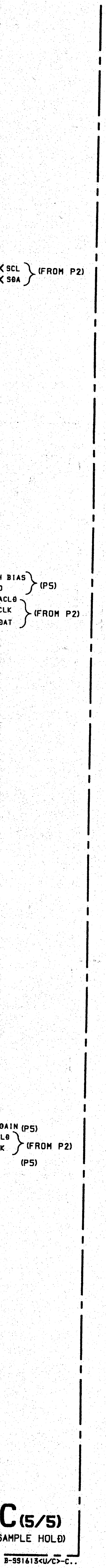
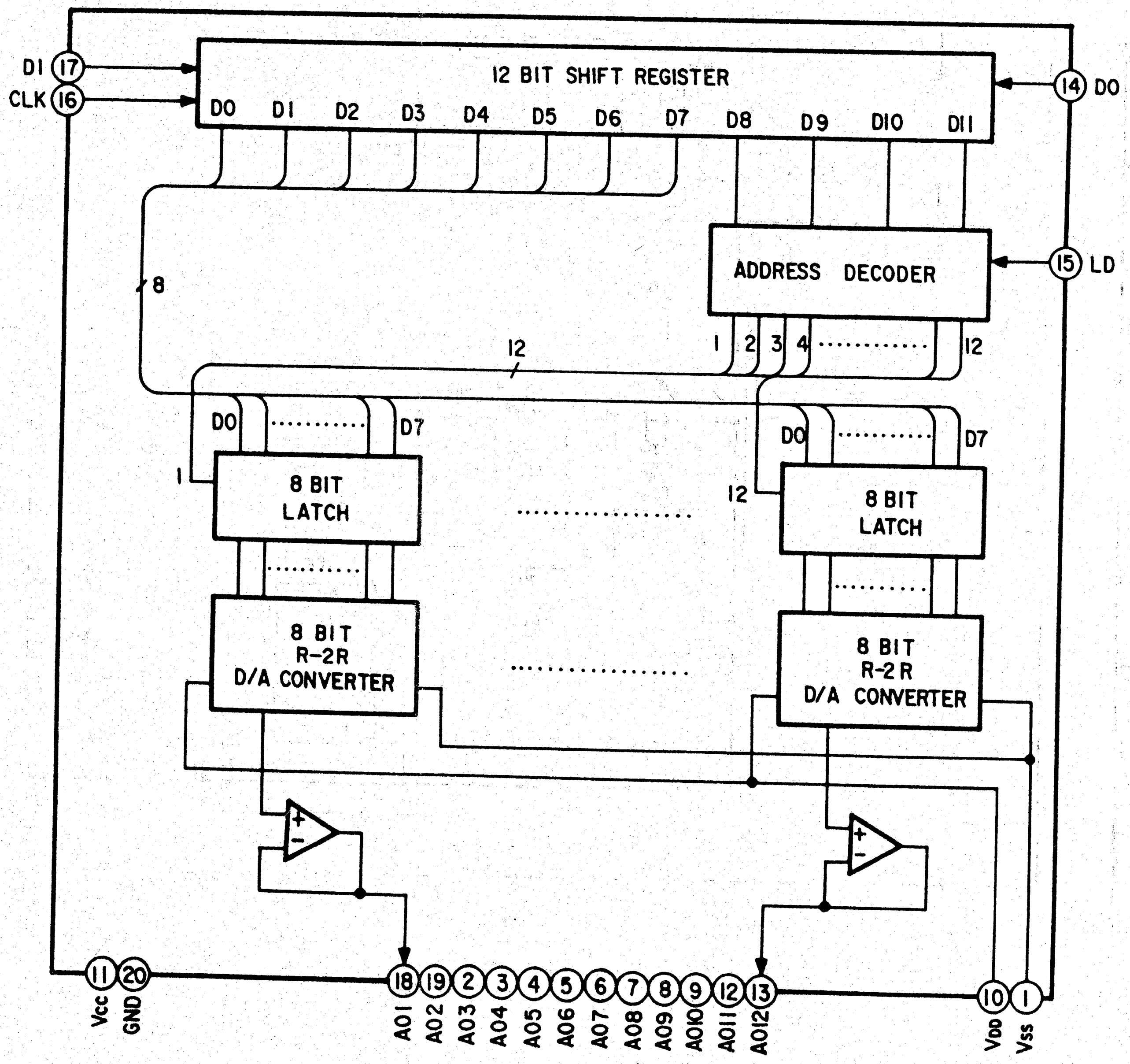
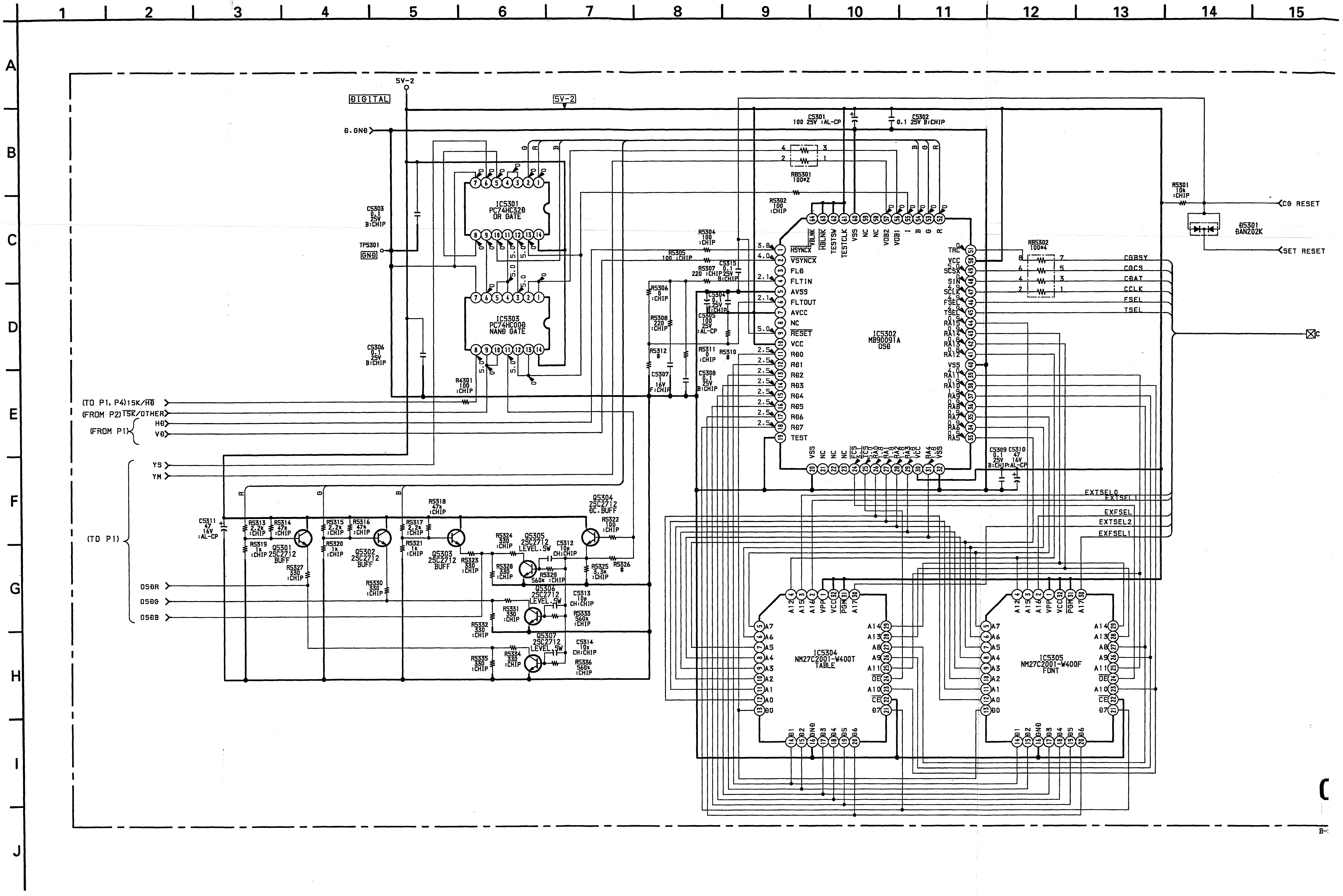
17
18
19
20
R1 BIAS
R BIAS
R3 BIAS
R3 GAIN
R GAIN
RL GAIN
RL BIAS
GND
R1 BIAS
R BIAS
R3 GAIN
R1 GAIN
VCC
GND
TP4519
R-VCOM
R4694 10 :CHIP
C4633 0.1 F:CHIP
C4635 10 :AL-CP
R4749 3.3k :CHIP
R4758 2.2 :CHIP
Q4560 HN1B01FU BUFF
Q4563 HN1B01FU BUFF
R4748 3.3k :CHIP
R4524 100 :CHIP
R4760 10 :CHIP
TP4526
R-SI01
R4759 2.2 :CHIP
R4668 390k :CHIP
C4605 16V B:CHIP
R4731 3.3k :CHIP
R4741 2.2 :CHIP
R4745 10 :CHIP
TP4521
R-SI02
R4742 2.2 :CHIP
R4677 390k :CHIP
Q4554 HN1B01FU BUFF
Q4557 HN1B01FU BUFF
R4730 3.3k :CHIP
R4570 100 :CHIP
+13V
(TO P4)
C4612 16V B:CHIP
R4718 3.3k :CHIP
R4728 2.2 :CHIP
R4735 10 :CHIP
TP4520
R-SI03
R4729 2.2 :CHIP
R4682 390k :CHIP
R4523 100 :CHIP
Q4549 HN1B01FU BUFF
Q4553 HN1B01FU BUFF
R4717 3.3k :CHIP
C4616 16V B:CHIP
R4704 3.3k :CHIP
R4711 2.2 :CHIP
R4725 10 :CHIP
TP4518
R-SI0
R4712 2.2 :CHIP
R4657 390k :CHIP
R4522 100 :CHIP
Q4542 HN1B01FU BUFF
Q4546 HN1B01FU BUFF
TP4517
R.GND
C4602 16V B:CHIP
R4703 3.3k :CHIP
R OUT
G OUT
B OUT
S1 OUT
R4514 22k :CHIP
R4516
R4518 22k :CHIP
C4630 0.1 F:CHIP
C4624 33 25V :AL-CP
R4517
C4544
R4515
C4543 10k :CHIP 25V
R4521 10k :CHIP
C4545 0.1 25V B:CHIP
C4524 0.01 B:CHIP
C4523 0.01 B:CHIP
C4522 0.01 B:CHIP
C4506 0.01 B:CHIP
RB4505 100*4
C4504 0.01 B:CHIP
C4503 0.01 B:CHIP
C4502 0.01 B:CHIP
C4501 0.01 B:CHIP
C4513 0.1 F:CHIP
C4510 47 16V :AL-CP
IC4503 M62393FP DA.CONV
GND VREFU2 AO1 AO2 AO3 AO4 VDD CS2 CS1 CS0
VREFU1 VREFL AO5 AO6 AO7 AO8 SDA SCL
5V-2
R4501 100 :CHIP
R4502 100 :CHIP
SCL
SDA
(FROM P2)
RB4506 100*4
R4503 100 :CHIP
R4573 8.2k :CHIP
IC4507 μPC358G2
C4571 0.1 16V B:CHIP
R4574
R4572 3.3k :CHIP
G1 BIAS
G BIAS
G3 BIAS
R4688 10 :CHIP
TP4513
G-VCOM
C4623 0.1 F:CHIP
C4629 10 :AL-CP
R4744 3.3k :CHIP
R4755 2.2 :CHIP
TP4516
G-SI01
R4757 10 :CHIP
R4756 2.2 :CHIP
R4667 390k :CHIP
R4529 100 :CHIP
Q4559 HN1B01FU BUFF
Q4562 HN1B01FU BUFF
R4743 3.3k :CHIP
C4607 16V B:CHIP
R4724 3.3k :CHIP
R4736 2.2 :CHIP
R4739 10 :CHIP
TP4515
G-SI02
R4737 2.2 :CHIP
R4676 390k :CHIP
R4530 100 :CHIP
Q4551 HN1B01FU BUFF
Q4556 HN1B01FU BUFF
R4723 3.3k :CHIP
+13V
(TO P4)
C4611 16V B:CHIP
R4710 3.3k :CHIP
R4721 2.2 :CHIP
R4734 10 :CHIP
TP4514
G-SI03
R4722 2.2 :CHIP
R4681 390k :CHIP
R4569 100 :CHIP
Q4545 HN1B01FU BUFF
Q4550 HN1B01FU BUFF
R4709 3.3k :CHIP
C4615 16V B:CHIP
R4702 3.3k :CHIP
R4707 2.2 :CHIP
R4719 10 :CHIP
TP4512
G-SI0
R4708 2.2 :CHIP
R4656 390k :CHIP
R4532 100 :CHIP
Q4541 HN1B01FU BUFF
Q4565 HN1B01FU BUFF
TP4511
G.GND
C4604 16V B:CHIP
R4701 3.3k :CHIP
R OUT
G OUT
B OUT
S1 OUT
R4543
R4545 22k :CHIP
C4634 0.1 F:CHIP
C4632 33 25V :AL-CP
R4544
C4538
C4570 0.1 25V B:CHIP
R4546 10k :CHIP
C4539 0.1 25V B:CHIP
G3 BIAS
G1 GAIN
G GAIN
G3 GAIN
GL GAIN
GL BIAS
GH GAIN
GH BIAS
GND
VCC
G VCOM
G1 BIAS
G BIAS
R4651 47 :CHIP
RH BIAS
GD
GACLG
GCLK
GDAT
(P5)
(FROM P2)
C4527 0.01 B:CHIP
C4516 0.01 B:CHIP
C4518 0.01 B:CHIP
C4529 0.01 B:CHIP
C4515 0.01 B:CHIP
C4517 0.01 B:CHIP
C4519 0.01 B:CHIP
C4520 0.01 B:CHIP
C4521 0.01 B:CHIP
C4525 0.01 B:CHIP
C4526 0.01 B:CHIP
C4528 0.01 B:CHIP
C4512 0.1 F:CHIP
C4509 47 16V :AL-CP
R4531 100 :CHIP
R4527 100 :CHIP
R4520 100 :CHIP
R4519 100 :CHIP
IC4501 MB88346BPFV-EF DA.CONV
VCC AO11 AO12 DO LD CLK DI AO1 AO2 GND
VDD AO10 AO9 AO8 AO7 AO6 AO5 AO4 AO3 VSS
5V-2
RB4502 100*4
RB4501 100*4
B1 BIAS
B BIAS
B3 BIAS
R4687 10 :CHIP
C4622 0.1 F:CHIP
TP4522
B-VCOM
C4625 10 :AL-CP
R4754 3.3k :CHIP
R4761 2.2 :CHIP
TP4527
B-SI01
R4763 10 :CHIP
R4672 2.2 :CHIP
R4666 390k :CHIP
R4550 100 :CHIP
Q4561 HN1B01FU BUFF
Q4564 HN1B01FU BUFF
R4753 3.3k :CHIP
C4606 16V B:CHIP
R4733 3.3k :CHIP
R4746 2.2 :CHIP
R4752 10 :CHIP
TP4525
B-SI02
R4747 2.2 :CHIP
R4675 390k :CHIP
R4551 100 :CHIP
Q4555 HN1B01FU BUFF
Q4558 HN1B01FU BUFF
R4732 3.3k :CHIP
+13V
(TO P4)
C4610 16V B:CHIP
R4716 3.3k :CHIP
R4726 2.2 :CHIP
R4751 10 :CHIP
TP4524
B-SI03
R4727 2.2 :CHIP
R4680 390k :CHIP
R4552 100 :CHIP
Q4548 HN1B01FU BUFF
Q4552 HN1B01FU BUFF
R4715 3.3k :CHIP
C4614 16V B:CHIP
R4706 3.3k :CHIP
R4713 2.2 :CHIP
R4720 10 :CHIP
TP4523
B-SI0
R4714 2.2 :CHIP
R4655 390k :CHIP
R4553 100 :CHIP
Q4543 HN1B01FU BUFF
Q4547 HN1B01FU BUFF
TP4501
B.GND
C4603 16V B:CHIP
R4705 3.3k :CHIP
R OUT
G OUT
B OUT
S1 OUT
R4565
R4567 22k :CHIP
C4637 0.1 F:CHIP
C4636 33 25V :AL-CP
C4553
R4548 10k :CHIP
C4554 0.1 25V B:CHIP
B3 BIAS
B1 GAIN
B GAIN
B3 GAIN
BL GAIN
BL BIAS
BH GAIN
BH BIAS
GND
VCC
B VCOM
B1 BIAS
B BIAS
RH GAIN (P5)
GACLG
GCLK
GD
(FROM P2)
(P5)
C4547 0.01 B:CHIP
C4550 0.01 B:CHIP
C4564 0.01 B:CHIP
R4598 100 :CHIP
C4562 0.01 B:CHIP
R4594 100 :CHIP
R4581 100 :CHIP
R4579 100 :CHIP
C4548 0.01 B:CHIP
C4549 0.01 B:CHIP
C4551 0.01 B:CHIP
C4552 0.01 B:CHIP
C4559 0.01 B:CHIP
C4560 0.01 B:CHIP
C4561 0.01 B:CHIP
C4563 0.01 B:CHIP
C4511 0.1 F:CHIP
C4508 47 16V :AL-CP
IC4502 MB88346BPFV-EF DA.CONV
VCC AO11 AO12 DO LD CLK DI AO1 AO2 GND
VDD AO10 AO9 AO8 AO7 AO6 AO5 AO4 AO3 VSS
5V-2
RB4503 100*4
RB4504 100*4
C (5/5)
(SAMPLE HOLD)
B-591613<U/C>-C..


SCL
SDA
(FROM P2)
BIAS
(P5)
CLO
CLK
DAT
(FROM P2)
GAIN (P5)
LO
K
(FROM P2)
(P5)
C(5/5)
SAMPLE HOLD)
B-991613<U/C>-C..

C (5/5) BOARD IC4501, IC4502 MB88346BPFV


DI 17
CLK 16
12 BIT SHIFT REGISTER
D0 D1 D2 D3 D4 D5 D6 D7 D8 D9 D10 D11
14 DO
ADDRESS DECODER
15 LD
8
1 2 3 4 12
12
D0 .... D7
D0 .... D7
1
12
8 BIT LATCH
8 BIT LATCH
8 BIT R-2R D/A CONVERTER
8 BIT R-2R D/A CONVERTER
+
-
11 Vcc
20 GND
18 AO1
19 AO2
2 AO3
3 AO4
4 AO5
5 AO6
6 AO7
7 AO8
8 AO9
9 AO10
12 AO11
13 AO12
10 VDD
1 Vss



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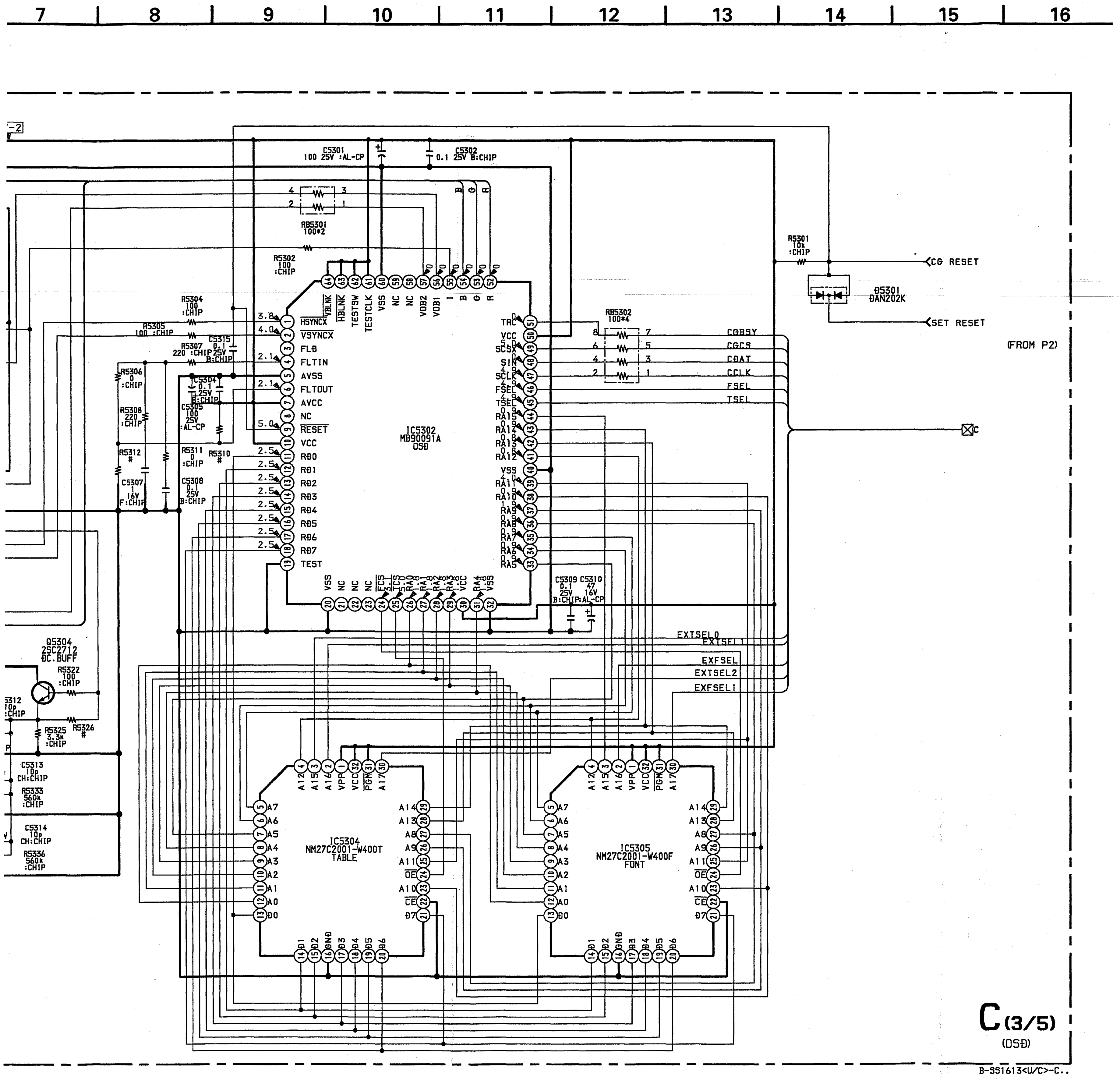
A
B
C
D
E
F
G
H
I
J
5V-2
DIGITAL
5V-2
D.GND
C5301 100 25V :AL-CP
C5302 0.1 25V B:CHIP
RB5301 100*2
IC5301 PC74HC32D OR GATE
IC5303 PC74HC00D NAND GATE
C5303 0.1 25V B:CHIP
TP5301
GND
C5306 0.1 25V B:CHIP
R4301 100 :CHIP
R5302 100 :CHIP
R5304 100 :CHIP
R5305 100 :CHIP
R5307 220 :CHIP
C5315 0.1 25V B:CHIP
R5306 0 :CHIP
C5304 0.1 25V B:CHIP
C5305 100 25V :AL-CP
R5308 220 :CHIP
R5312
R5311 0 :CHIP
R5310
C5307 1 16V F:CHIP
C5308 0.1 25V B:CHIP
IC5302 MB90091A OSD
HSYNCX
VSYNCX
FLD
FLTIN
AVSS
FLTOUT
AVCC
NC
RESET
VCC
RD0
RD1
RD2
RD3
RD4
RD5
RD6
RD7
TEST
VBLNK
HBLNK
TESTSW
TESTCLK
VSS
VDB2
VDB1
I
B
G
R
TRC
SCSX
SIN
SCLK
FSEL
TSEL
RA15
RA14
RA13
RA12
RA11
RA10
RA9
RA8
RA7
RA6
RA5
RA4
ECS
RA0
RA1
RA2
RA3
R5301 10k :CHIP
D5301 DAN202K
CG RESET
SET RESET
RB5302 100*4
CGBSY
CGCS
CDAT
CCLK
FSEL
TSEL
C
C5309 0.1 25V B:CHIP
C5310 47 16V :AL-CP
EXTSEL0
EXTSEL1
EXFSEL
EXTSEL2
EXFSEL1
(TO P1, P4) 15K/HD
(FROM P2) 15K/OTHER
(FROM P1) HD
VD
YS
YM
(TO P1)
OSDR
OSDG
OSDB
C5311 47 16V :AL-CP
R5313 2.2k :CHIP
R5314 47k :CHIP
R5319 1k :CHIP
Q5301 2SC2712 BUFF
R5327 330 :CHIP
R5315 2.2k :CHIP
R5316 47k :CHIP
R5320 1k :CHIP
Q5302 2SC2712 BUFF
R5330 330 :CHIP
R5317 2.2k :CHIP
R5318 47k :CHIP
R5321 1k :CHIP
Q5303 2SC2712 BUFF
R5323 330 :CHIP
R5324 330 :CHIP
Q5305 2SC2712 LEVEL.SW
C5312 10p CH:CHIP
R5328 330 :CHIP
R5329 560k :CHIP
Q5304 2SC2712 DC.BUFF
R5322 100 :CHIP
R5325 3.3k :CHIP
R5326
Q5306 2SC2712 LEVEL.SW
R5331 330 :CHIP
R5332 330 :CHIP
C5313 10p CH:CHIP
R5333 560k :CHIP
Q5307 2SC2712 LEVEL.SW
R5334 330 :CHIP
R5335 330 :CHIP
C5314 10p CH:CHIP
R5336 560k :CHIP
IC5304 NM27C2001-W400T TABLE
IC5305 NM27C2001-W400F FONT
A12
A15
A16
VPP
VCC
PGM
A17
A14
A13
A8
A9
A11
OE
A10
CE
D7
A7
A6
A5
A4
A3
A2
A1
A0
D0
D1
D2
GND
D3
D4
D5
D6
B-


7
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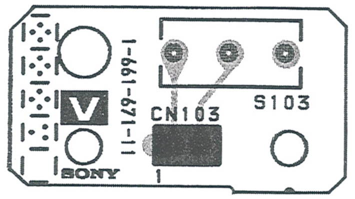
11
12
13
14
15
16
C5301 100 25V :AL-CP
C5302 0.1 25V B:CHIP
RB5301 100*2
R5302 100 :CHIP
R5304 100 :CHIP
R5305 100 :CHIP
R5307 220 :CHIP
C5315 0.1 25V B:CHIP
R5306 0 :CHIP
R5308 220 :CHIP
C5304 0.1 25V B:CHIP
C5305 100 25V :AL-CP
R5312
C5307 1 16V F:CHIP
R5311 0 :CHIP
R5310
C5308 0.1 25V B:CHIP
IC5302 MB90091A OSD
HSYNCX
VSYNCX
FL0
FLTIN
AVSS
FLTOUT
AVCC
NC
RESET
VCC
R00
R01
R02
R03
R04
R05
R06
R07
TEST
VBLNK
HBLNK
TESTSW
TESTCLK
VSS
VOB2
VOB1
I
B
G
R
TRC
SCSX
SIN
SCLK
FSEL
TSEL
RA15
RA14
RA13
RA12
RA11
RA10
RA9
RA8
RA7
RA6
RA5
FCS
TCS
RA0
RA1
RA2
RA3
RA4
RB5302 100*4
CGBSY
CGCS
CDAT
CCLK
FSEL
TSEL
R5301 10k :CHIP
CG RESET
D5301 DAN202K
SET RESET
(FROM P2)
C5309 0.1 25V B:CHIP
C5310 47 16V :AL-CP
EXTSEL0
EXTSEL1
EXFSEL
EXTSEL2
EXFSEL1
Q5304 2SC2712 OC.BUFF
R5322 100 :CHIP
R5325 3.3k :CHIP
R5326
C5313 10p CH:CHIP
R5333 560k :CHIP
C5314 10p CH:CHIP
R5336 560k :CHIP
IC5304 NM27C2001-W400T TABLE
IC5305 NM27C2001-W400F FONT
A0
A1
A2
A3
A4
A5
A6
A7
A8
A9
A10
A11
A12
A13
A14
A15
A16
A17
VPP
VCC
PGM
OE
CE
D0
D1
D2
D3
D4
D5
D6
D7
GND
C (3/5)
(OSD)
B-SS1613<U/C>-C..

Schematic diagram

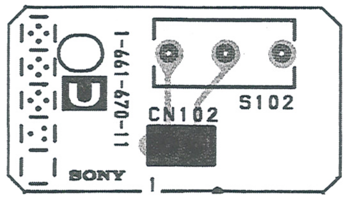
← C (3/5) board

H [CONTROL PANEL] **NF** [RECEIVER] **NR** [INPUT, OUTPUT, RECEIVER] **U** [PROT SW] **V** [PROT SW]

– V BOARD – (US/Canadian Model)

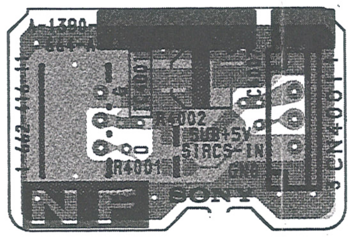

1-661-671-11
V
CN103
S103
SONY
1

– U BOARD –

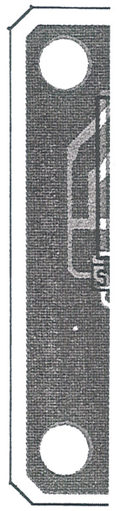

1-661-670-11
U
CN102
S102
SONY
1

– NF BOARD –

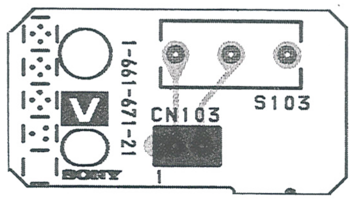
<Component Side>


R4002
SUB+5V
SIRCS-IN
GND
R4001
CN4001
NF
SONY

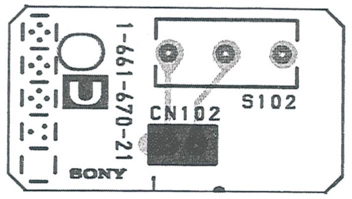
– NR BO



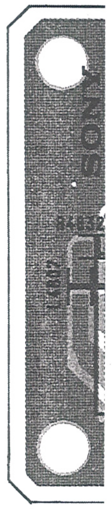
– V BOARD – (AEP Model)


1-661-671-21
V
CN103
S103
SONY
1

– U BOARD –

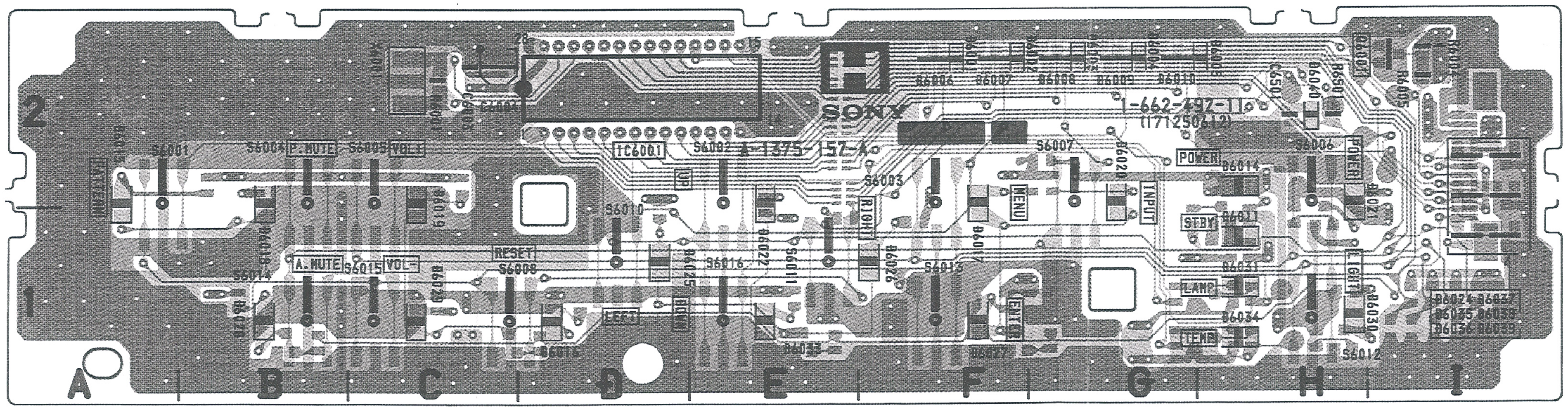

1-661-670-21
U
CN102
S102
SONY
1

<Conduct

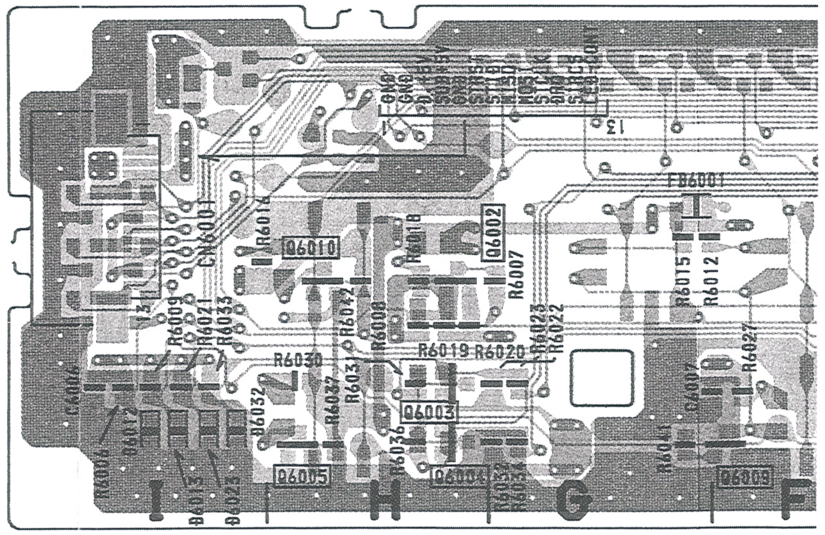


- ▨ : Pattern from the side which enables seeing.
- ▩ : Pattern of the rear side.

– H BOARD – <Component Side>


2
1
A
B
C
D
E
F
G
H
I
H
SONY
1-662-492-11
(171250412)
A-1375-157-A
IC6001
S6001
PATTERN
S6004
P.MUTE
S6005
VOL+
S6002
UP
S6010
S6003
RIGHT
S6007
MENU
INPUT
POWER
D6014
STBY
S6006
POWER
LIGHT
LAMP
TEMP
S6012
S6014
A.MUTE
S6015
VOL-
RESET
S6008
LEFT
DOWN
S6016
S6013
ENTER
D6027
D6016
D6033
D6034
D6031
D6024 D6037
D6035 D6038
D6036 D6039

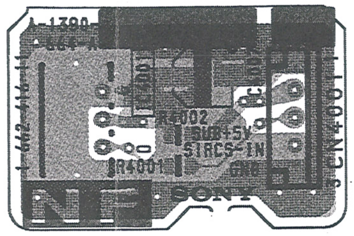
<Conductor Side>


CN6001
FB6001
Q6010
Q6002
Q6003
Q6004
Q6005
Q6009
R6030
R6019 R6020
R6015
R6012
I
H
G
F

U [PROT SW]   **V** [PROT SW]

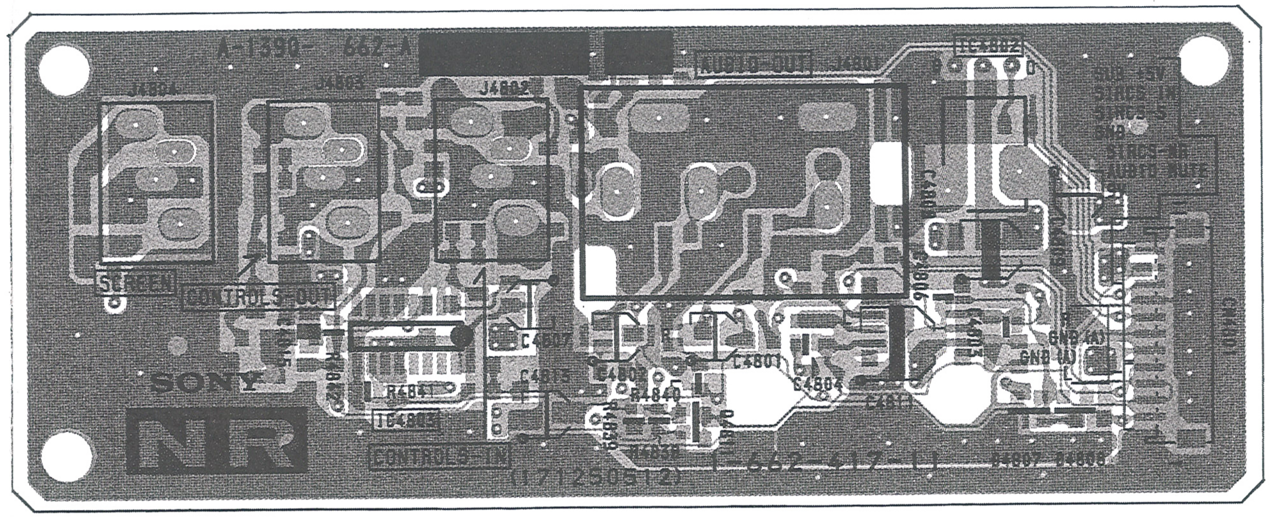
– NF BOARD –

<Component Side>



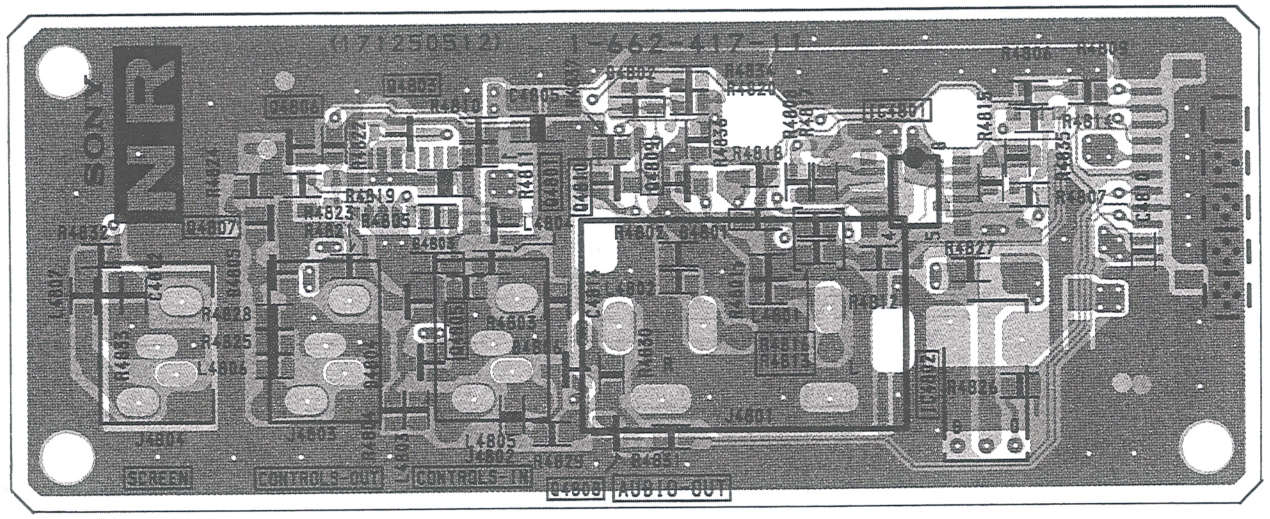
R4002
BUB+5V
STRCS-IN
GND
R4001
CN4001
SONY
NF

– NR BOARD – <Component Side>



A-1390-662-A
J4804
J4803
J4802
J4801
AUDIO-OUT
IC4802
SCREEN
CONTROLS-OUT
CONTROLS-IN
C4807
C4813
C4806
C4801
C4804
C4811
R4841
IC4803
CN4801
GND +5V
STRCS IN
STRCS-NR
AUDIO MUTE
SONY
NR
(171250512)
1-662-417-11

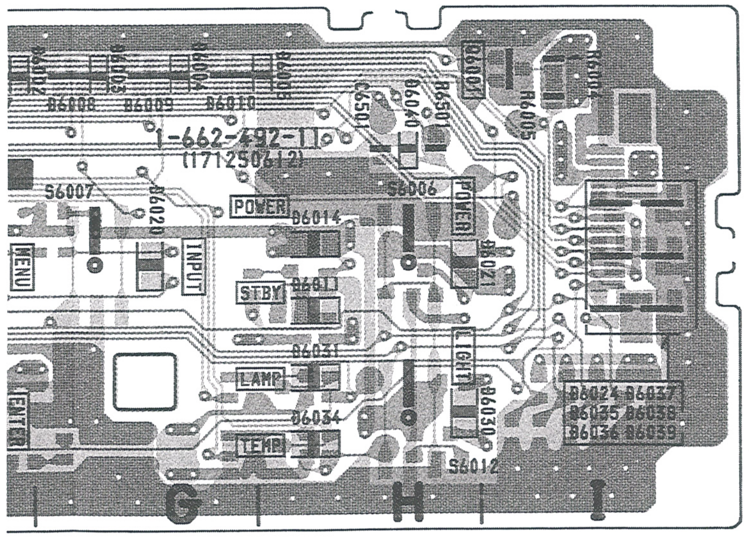
<Conductor Side>



(171250512)
1-662-417-11
SONY
NR
IC4801
Q4807
Q4806
Q4808
R4802
R4827
R4826
J4804
J4803
J4801
SCREEN
CONTROLS-OUT
CONTROLS-IN
AUDIO-OUT

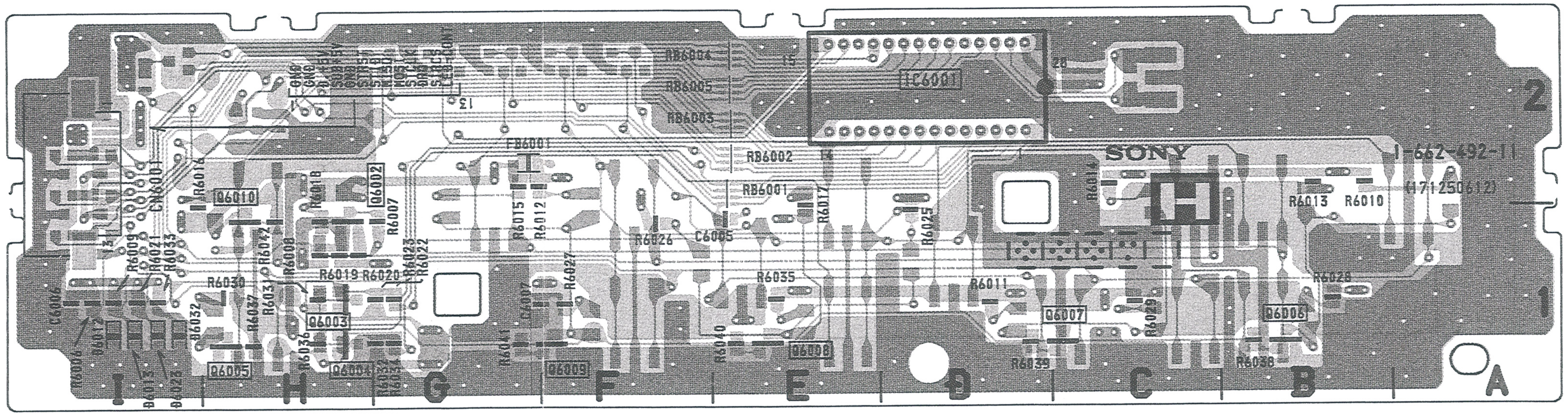
● ▨ : Pattern from the side which enables seeing.

● ▨ : Pattern of the rear side.

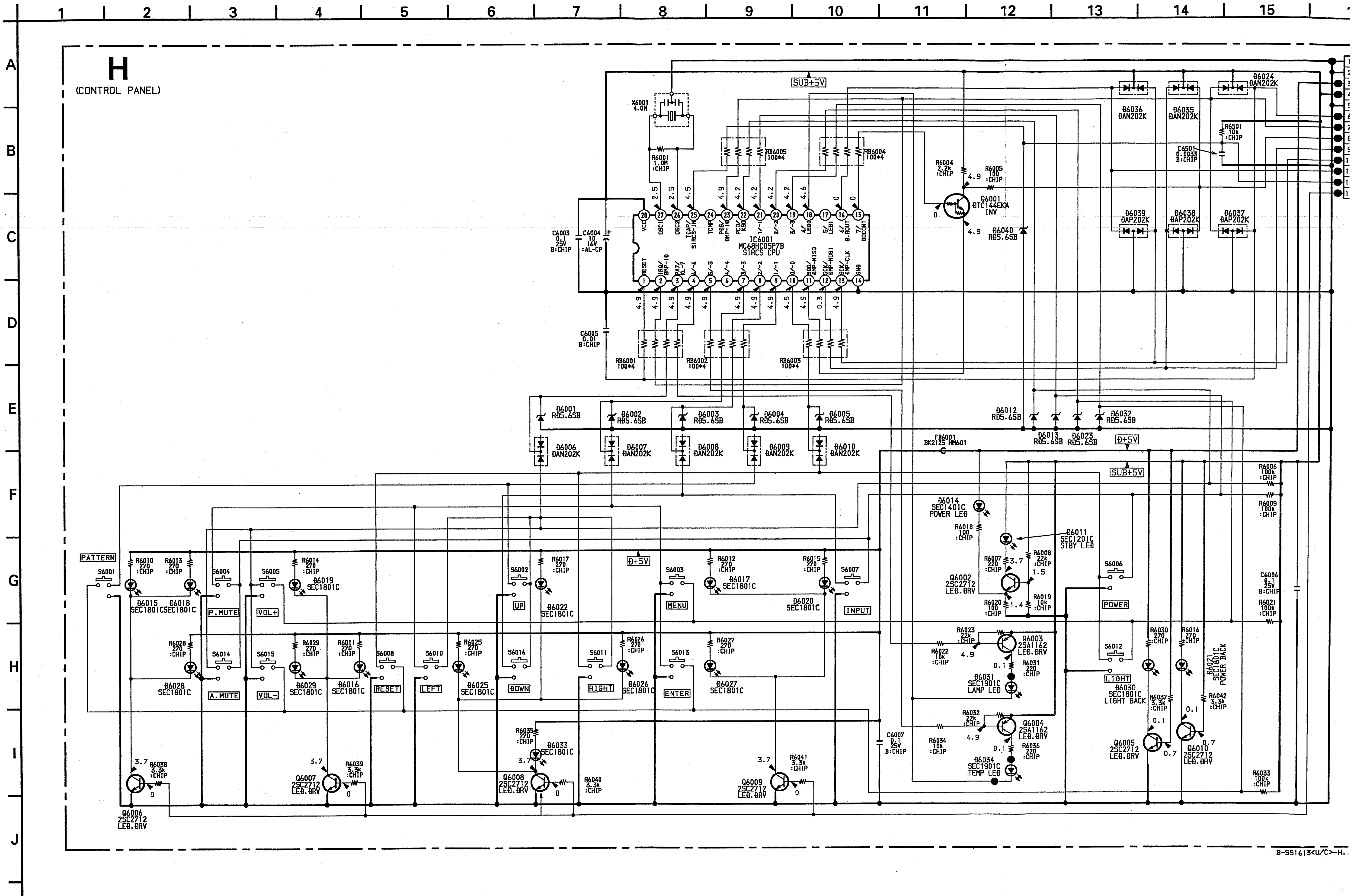


1-662-492-11
(171250612)
S6007
S6006
POWER
INPUT
STBY
MENU
LAMP
TEMP
ENTER
LIGHT
S6012
R6024 R6037
R6035 R6038
R6036 R6039
G
H
I

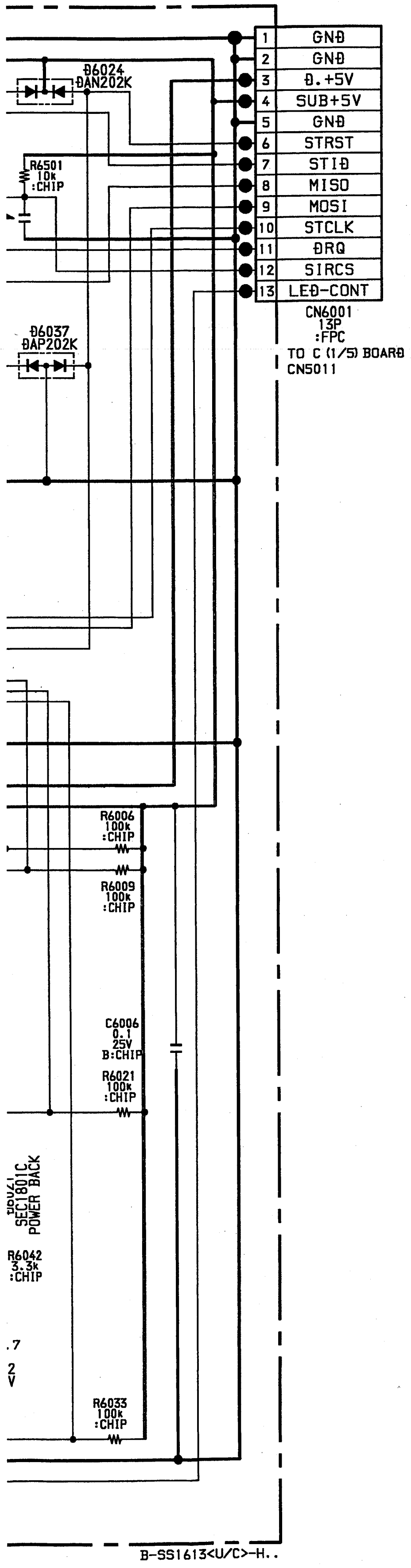
<Conductor Side>

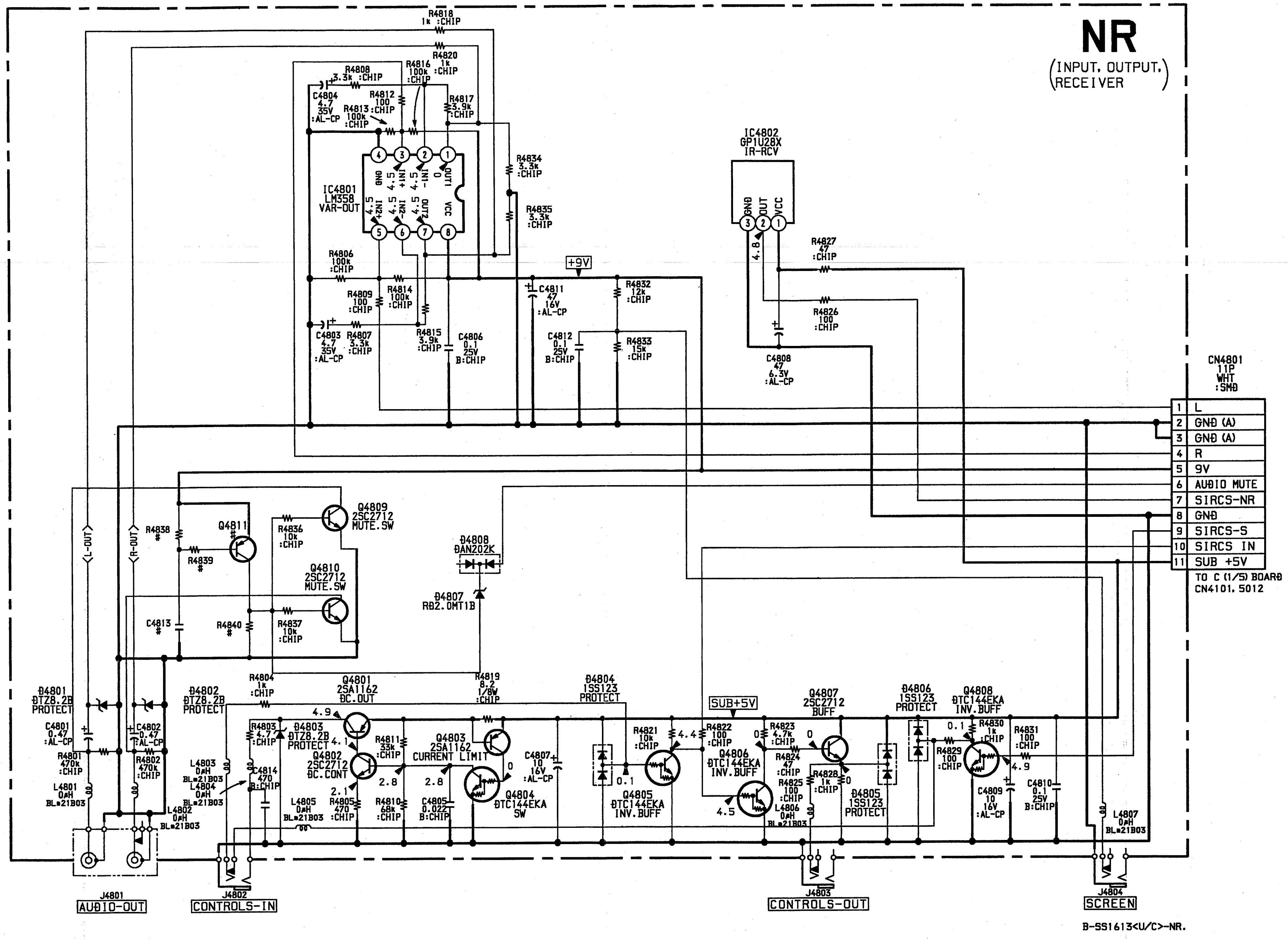


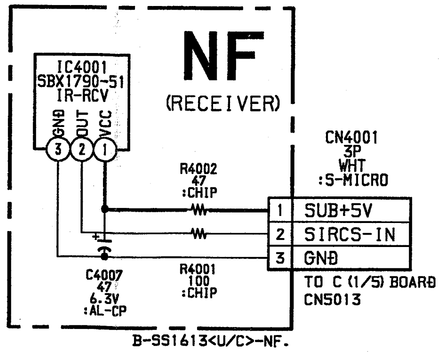
IC6001
CN6001
RB6004
RB6005
RB6003
RB6002
RB6001
FB6001
Q6010
Q6002
Q6003
Q6004
Q6005
Q6009
Q6008
Q6007
Q6006
SONY
1-662-492-11
(171250612)
R6013
R6010
I
H
G
F
E
D
C
B
A
1
2

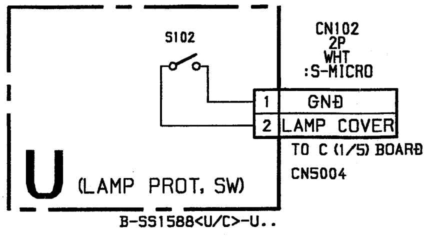


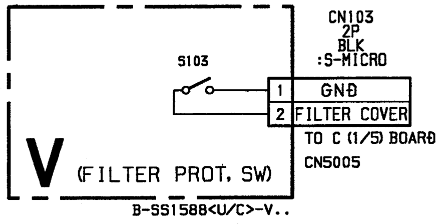
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
A
B
C
D
E
F
G
H
I
J
H
(CONTROL PANEL)
SUB+5V
X6001
4.0M
R6001
1.0M
:CHIP
RB6005
100*4
RB6004
100*4
R6004
2.2k
:CHIP
R6005
100
:CHIP
Q6001
DTC144EKA
INV
D6040
RD5.6SB
D6036
DAN202K
D6035
DAN202K
D6024
DAN202K
R6501
10k
:CHIP
C6501
0.0033
B:CHIP
D6039
DAP202K
D6038
DAP202K
D6037
DAP202K
C6003
0.1
25V
B:CHIP
C6004
10
16V
:AL-CP
IC6001
MC68HC05P7B
SIRCS CPU
VCC
OSC1
OSC2
TCAP/SIRCS-IN
TCMP
PD5/GMP-TX
PD7/KS0
1/-1
2/-2
3/-3
4/LED0
5/LED1
6/D.ROUT
7/DDCONT
RESET
IRQ/GMP-ID
PA7/KL-7
6/-6
5/-5
4/-4
3/-3
2/-2
1/-1
0/-0
SDO/GMP-MISO
SCK/GMP-MOSI
SCK/GMP-CLK
GND
C6005
0.01
B:CHIP
RB6001
100*4
RB6002
100*4
RB6003
100*4
D6001
RD5.6SB
D6002
RD5.6SB
D6003
RD5.6SB
D6004
RD5.6SB
D6005
RD5.6SB
D6012
RD5.6SB
D6013
RD5.6SB
D6023
RD5.6SB
D6032
RD5.6SB
D6006
DAN202K
D6007
DAN202K
D6008
DAN202K
D6009
DAN202K
D6010
DAN202K
FB6001
BK2125 HM601
D+5V
SUB+5V
R6006
100k
:CHIP
R6009
100k
:CHIP
D6014
SEC1401C
POWER LED
R6018
100
:CHIP
D6011
SEC1201C
STBY LED
Q6002
2SC2712
LED.DRV
R6007
220
:CHIP
R6008
22k
:CHIP
R6019
10k
:CHIP
R6020
100
:CHIP
S6006
POWER
C6006
0.1
25V
B:CHIP
R6021
100k
:CHIP
PATTERN
S6001
R6010
270
:CHIP
R6013
270
:CHIP
D6015
SEC1801C
D6018
SEC1801C
S6004
P.MUTE
S6005
VOL+
R6014
270
:CHIP
D6019
SEC1801C
S6002
UP
R6017
270
:CHIP
D6022
SEC1801C
D+5V
S6003
MENU
R6012
270
:CHIP
D6017
SEC1801C
R6015
270
:CHIP
S6007
INPUT
D6020
SEC1801C
R6028
270
:CHIP
D6028
SEC1801C
S6014
A.MUTE
S6015
VOL-
R6029
270
:CHIP
D6029
SEC1801C
R6011
270
:CHIP
D6016
SEC1801C
S6008
RESET
S6010
LEFT
R6025
270
:CHIP
D6025
SEC1801C
S6016
DOWN
S6011
RIGHT
R6026
270
:CHIP
D6026
SEC1801C
S6013
ENTER
R6027
270
:CHIP
D6027
SEC1801C
R6023
22k
:CHIP
R6022
10k
:CHIP
Q6003
2SA1162
LED.DRV
R6031
220
:CHIP
D6031
SEC1901C
LAMP LED
S6012
LIGHT
D6030
SEC1801C
LIGHT BACK
R6030
270
:CHIP
R6016
270
:CHIP
D6021
SEC1801C
POWER BACK
R6037
3.3k
:CHIP
R6042
3.3k
:CHIP
R6032
22k
:CHIP
Q6004
2SA1162
LED.DRV
R6034
10k
:CHIP
R6036
220
:CHIP
D6034
SEC1901C
TEMP LED
C6007
0.1
25V
B:CHIP
Q6005
2SC2712
LED.DRV
Q6010
2SC2712
LED.DRV
R6033
100k
:CHIP
R6035
270
:CHIP
D6033
SEC1801C
Q6008
2SC2712
LED.DRV
R6040
3.3k
:CHIP
R6038
3.3k
:CHIP
Q6006
2SC2712
LED.DRV
Q6007
2SC2712
LED.DRV
R6039
3.3k
:CHIP
Q6009
2SC2712
LED.DRV
R6041
3.3k
:CHIP
B-SS1613<U/C>-H..


D6024
DAN202K
R6501
10k
:CHIP
D6037
DAP202K
1 GND
2 GND
3 D.+5V
4 SUB+5V
5 GND
6 STRST
7 STID
8 MISO
9 MOSI
10 STCLK
11 DRQ
12 SIRCS
13 LED-CONT
CN6001
13P
:FPC
TO C (1/5) BOARD
CN5011
R6006
100k
:CHIP
R6009
100k
:CHIP
C6006
0.1
25V
B:CHIP
R6021
100k
:CHIP
SEC1801C
POWER BACK
R6042
3.3k
:CHIP
R6033
100k
:CHIP
B-SS1613<U/C>-H..


NR
(INPUT, OUTPUT, RECEIVER)
R4818
1k :CHIP
R4808
3.3k :CHIP
R4816
100k
:CHIP
R4820
1k
:CHIP
C4804
4.7
35V
:AL-CP
R4812
100
:CHIP
R4813
100k
:CHIP
R4817
3.9k
:CHIP
IC4801
LM358
VAR-OUT
GND
+IN1
-IN1
OUT1
+IN2
-IN2
OUT2
VCC
R4834
3.3k
:CHIP
R4835
3.3k
:CHIP
R4806
100k
:CHIP
R4809
100
:CHIP
R4814
100k
:CHIP
C4803
4.7
35V
:AL-CP
R4807
3.3k
:CHIP
R4815
3.9k
:CHIP
C4806
0.1
25V
B:CHIP
+9V
C4811
47
16V
:AL-CP
R4832
12k
:CHIP
C4812
0.1
25V
B:CHIP
R4833
15k
:CHIP
IC4802
GP1U28X
IR-RCV
GND
OUT
VCC
4.8
R4827
47
:CHIP
R4826
100
:CHIP
C4808
47
6.3V
:AL-CP
CN4801
11P
WHT
:SMD
1 L
2 GND (A)
3 GND (A)
4 R
5 9V
6 AUDIO MUTE
7 SIRCS-NR
8 GND
9 SIRCS-S
10 SIRCS IN
11 SUB +5V
TO C (1/5) BOARD
CN4101, 5012
L-OUT
R-OUT
R4838
Q4811
R4839
R4836
10k
:CHIP
Q4809
2SC2712
MUTE.SW
Q4810
2SC2712
MUTE.SW
C4813
R4840
R4837
10k
:CHIP
D4808
DAN202K
D4807
RD2.0MT1B
D4801
DTZ8.2B
PROTECT
C4801
0.47
:AL-CP
R4801
470k
:CHIP
L4801
0µH
BL=21B03
D4802
DTZ8.2B
PROTECT
C4802
0.47
:AL-CP
R4802
470k
:CHIP
L4802
0µH
BL=21B03
L4803
0µH
BL=21B03
L4804
0µH
BL=21B03
R4804
1k
:CHIP
R4803
4.7k
:CHIP
C4814
470
B:CHIP
L4805
0µH
BL=21B03
D4803
DTZ8.2B
PROTECT
Q4801
2SA1162
DC.OUT
Q4802
2SC2712
DC.CONT
R4805
470
:CHIP
R4811
33k
:CHIP
R4810
68k
:CHIP
C4805
0.022
B:CHIP
R4819
8.2
1/8W
:CHIP
Q4803
2SA1162
CURRENT LIMIT
Q4804
DTC144EKA
SW
C4807
10
16V
:AL-CP
D4804
1SS123
PROTECT
R4821
10k
:CHIP
Q4805
DTC144EKA
INV.BUFF
SUB+5V
R4822
100
:CHIP
Q4806
DTC144EKA
INV.BUFF
R4823
4.7k
:CHIP
R4824
47
:CHIP
R4825
100
:CHIP
L4806
0µH
BL=21B03
R4828
1k
:CHIP
Q4807
2SC2712
BUFF
D4805
1SS123
PROTECT
D4806
1SS123
PROTECT
Q4808
DTC144EKA
INV.BUFF
R4830
1k
:CHIP
R4829
100
:CHIP
R4831
100
:CHIP
C4809
10
16V
:AL-CP
C4810
0.1
25V
B:CHIP
L4807
0µH
BL=21B03
J4801
AUDIO-OUT
J4802
CONTROLS-IN
J4803
CONTROLS-OUT
J4804
SCREEN
B-SS1613<U/C>-NR.

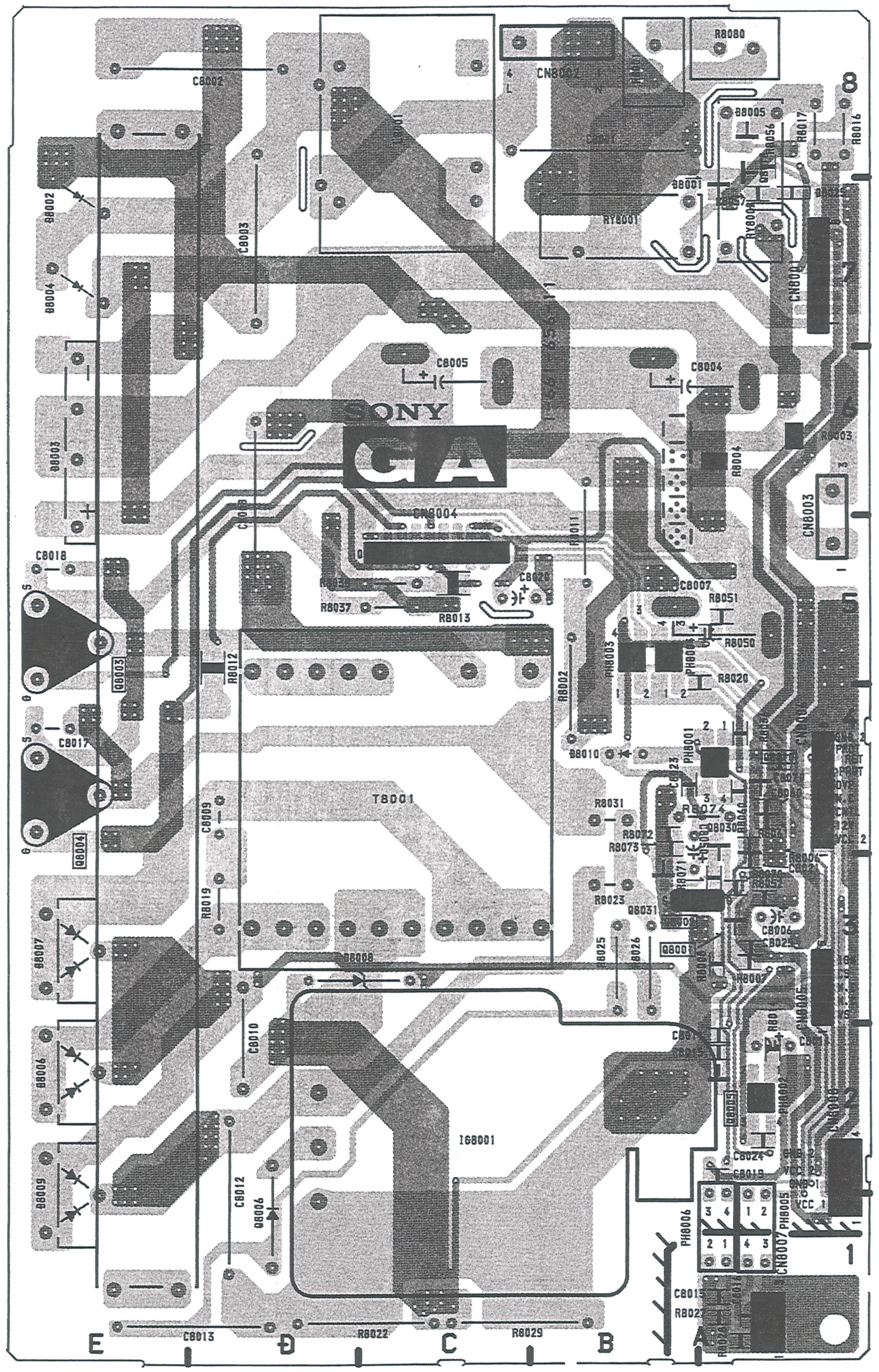

NF
(RECEIVER)
IC4001
SBX1790-51
IR-RCV
GND
OUT
VCC
R4002
47
:CHIP
C4007
47
6.3V
:AL-CP
R4001
100
:CHIP
CN4001
3P
WHT
:S-MICRO
1 SUB+5V
2 SIRCS-IN
3 GND
TO C (1/5) BOARD
CN5013
B-SS1613<U/C>-NF.


U
(LAMP PROT. SW)
S102
CN102
2P
WHT
:S-MICRO
1 GND
2 LAMP COVER
TO C (1/5) BOARD
CN5004
B-SS1588<U/C>-U..

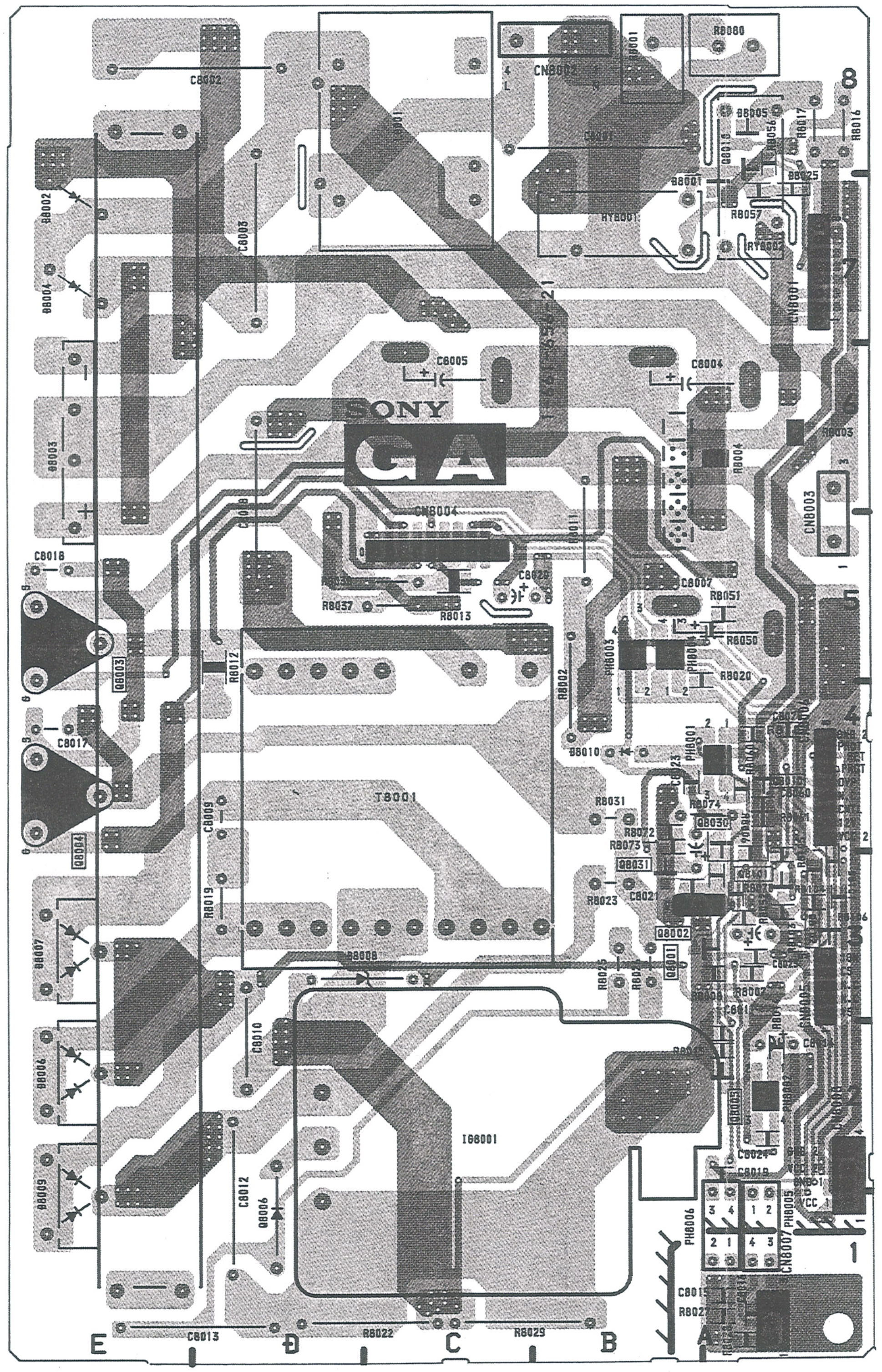

V
(FILTER PROT. SW)
S103
CN103
2P
BLK
:S-MICRO
1 GND
2 FILTER COVER
TO C (1/5) BOARD
CN5005
B-SS1588<U/C>-V..

GA [LAMP POWER SUPPLY]

– GA BOARD – **(US/Canadian Model)**


SONY
GA
C8002
C8003
D8002
D8004
D8003
C8005
C8004
CN8002
RY8001
R8080
CN8001
CN8003
CN8004
C8018
C8017
Q8003
Q8004
R8012
R8037
R8013
R8051
R8050
R8020
PH8003
PH8001
R8031
R8072
R8073
R8023
Q8031
T8001
C8009
R8019
R8008
D8007
D8008
D8009
C8010
C8012
D8006
IC8001
PH8006
PH8005
C8015
R8027
C8013
R8022
R8029
E
D
C
B
A
1
2
3
4
5
6
7
8

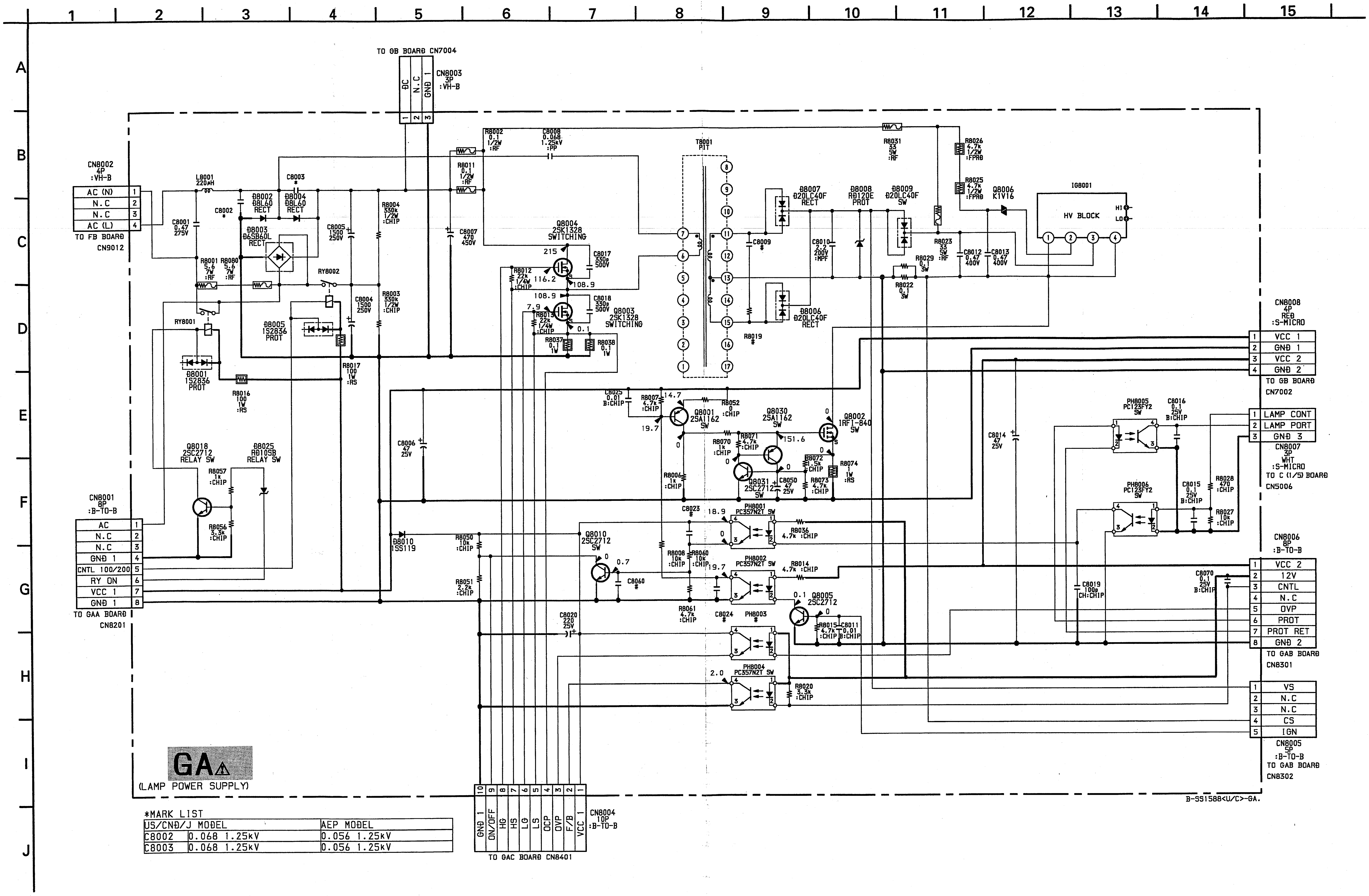
– GA BOARD – **(AEP Model)**


SONY
GA
C8002
C8003
D8002
D8004
D8003
C8005
C8004
CN8002
RY8001
R8080
CN8001
CN8003
CN8004
C8018
C8017
Q8003
Q8004
R8012
R8037
R8013
R8051
R8050
R8020
PH8001
R8031
R8072
R8073
R8023
T8001
C8009
R8019
R8008
D8007
D8008
D8009
C8010
C8012
D8006
IC8001
PH8006
PH8005
C8015
R8027
C8013
R8022
R8029
E
D
C
B
A
1
2
3
4
5
6
7
8

- ▨ : Pattern from the side which enables seeing.
- ■ : Pattern of the rear side.

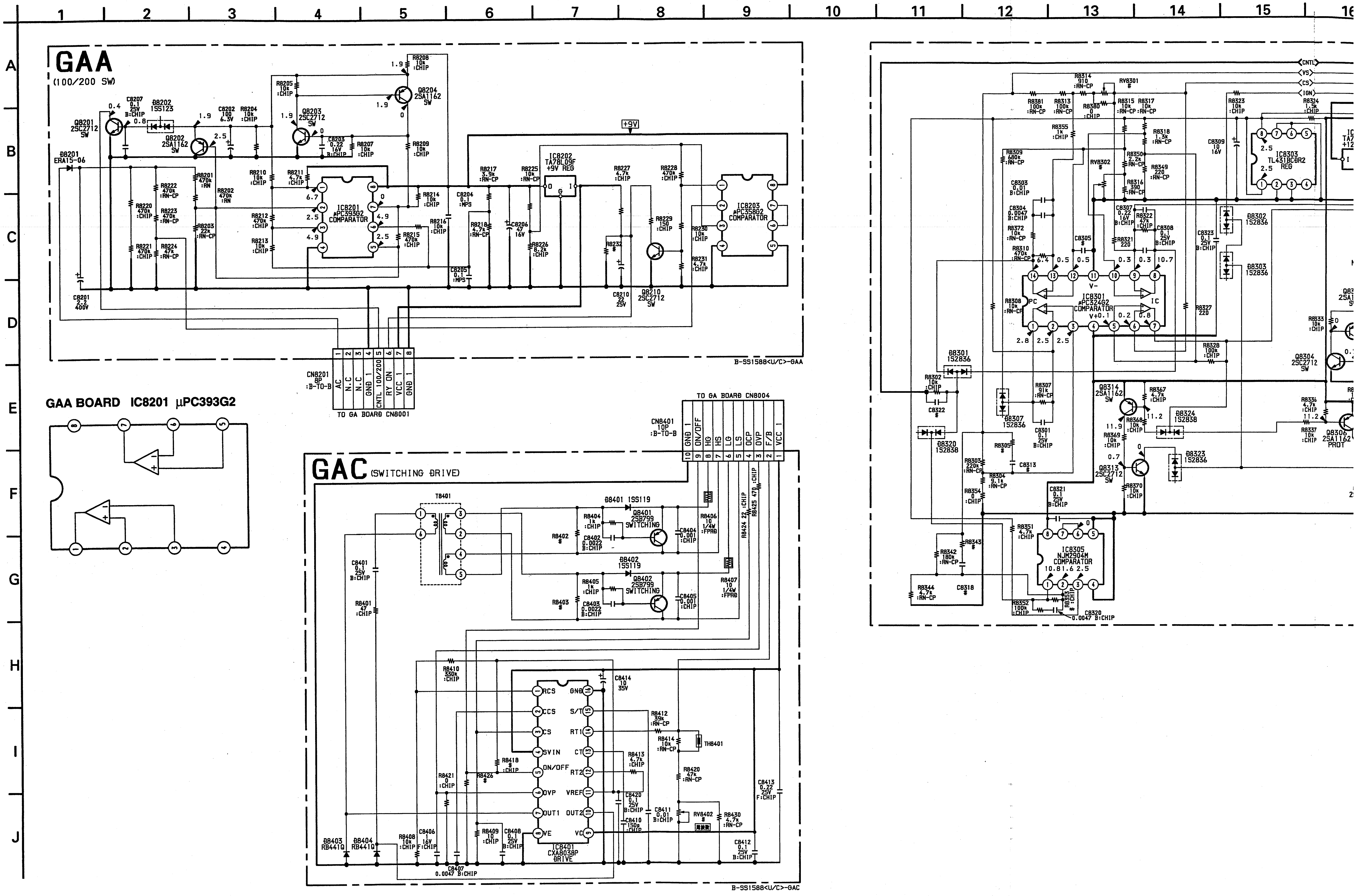
Schematic diagrams
← H, NF, NR, U, V boards

Schematic diagram
GA board ➡


1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
A
B
C
D
E
F
G
H
I
J
TO GB BOARD CN7004
CN8003 3P :VH-B
DC
N.C
GND 1
CN8002 4P :VH-B
AC (N)
N.C
N.C
AC (L)
TO FB BOARD CN9012
L8001 220µH
C8001 0.47 275V
C8002 *
D8002 D8L60 RECT
C8003 *
D8004 D8L60 RECT
D8003 D6SB60L RECT
R8001 5.6 7W :RF
R8080 5.6 7W :RF
RY8002
RY8001
D8001 1S2836 PROT
D8005 1S2836 PROT
C8005 1500 250V
C8004 1500 250V
R8004 330k 1/2W :CHIP
R8003 330k 1/2W :CHIP
R8017 100 1W :RS
R8016 100 1W :RS
R8002 0.1 1/2W :RF
R8011 0.1 1/2W :RF
C8008 0.068 1.25kV :PP
C8007 470 450V
Q8004 2SK1328 SWITCHING
Q8003 2SK1328 SWITCHING
C8017 330p 500V
C8018 330p 500V
R8012 22k 1/4W :CHIP
R8013 22k 1/4W :CHIP
R8037 0.1 1W
R8038 0.1 1W
215
116.2
108.9
7.9
0.1
T8001 PIT
D8007 D20LC40F RECT
D8008 RD120E PROT
D8009 D20LC40F SW
D8006 D20LC40F RECT
C8009 *
C8010 2.2 200V :MPF
R8019 *
R8031 33 5W :RF
R8026 4.7k 1/2W :FPRD
R8025 4.7k 1/2W :FPRD
Q8006 K1V16
R8023 33 5W :RF
R8029 0.1 3W
R8022 0.1 3W
C8012 0.47 400V
C8013 0.47 400V
IG8001
HV BLOCK
HI
LO
CN8008 4P RED :S-MICRO
VCC 1
GND 1
VCC 2
GND 2
TO GB BOARD CN7002
Q8018 2SC2712 RELAY SW
D8025 RD10SB RELAY SW
R8057 1k :CHIP
R8056 3.3k :CHIP
C8025 0.01 B:CHIP
R8007 4.7k :CHIP
14.7
19.7
R8052 0 :CHIP
Q8001 2SA1162 SW
Q8030 2SA1162 SW
Q8002 IRFI-840 SW
R8070 1k :CHIP
R8071 4.7k :CHIP
151.6
R8072 1.5k :CHIP
R8074 1 1W :RS
R8006 1k :CHIP
Q8031 2SC2712 SW
C8050 47 25V
R8073 4.7k :CHIP
C8006 47 25V
C8014 47 25V
PH8005 PC123FY2 SW
C8016 0.1 25V B:CHIP
PH8006 PC123FY2 SW
C8015 0.1 25V B:CHIP
R8028 470 :CHIP
R8027 10k :CHIP
CN8007 3P WHT :S-MICRO
LAMP CONT
LAMP PORT
GND 3
TO C (1/5) BOARD CN5006
CN8001 8P :B-TO-B
AC
N.C
N.C
GND 1
CNTL 100/200
RY ON
VCC 1
GND 1
TO GAA BOARD CN8201
D8010 1SS119
R8050 10k :CHIP
R8051 2.2k :CHIP
Q8010 2SC2712 SW
0.7
C8060 *
C8023 *
18.9
PH8001 PC357N2T SW
R8036 4.7k :CHIP
R8008 10k :CHIP
R8060 10k :CHIP
19.7
PH8002 PC357N2T SW
R8014 4.7k :CHIP
R8061 4.7k :CHIP
C8024 *
PH8003 *
Q8005 2SC2712
R8015 4.7k :CHIP
C8011 0.01 B:CHIP
C8020 220 25V
PH8004 PC357N2T SW
2.0
R8020 3.3k :CHIP
C8019 100p CH:CHIP
C8070 0.1 25V B:CHIP
CN8006 8P :B-TO-B
VCC 2
12V
CNTL
N.C
OVP
PROT
PROT RET
GND 2
TO GAB BOARD CN8301
VS
N.C
N.C
CS
IGN
CN8005 5P :B-TO-B TO GAB BOARD CN8302
GA
(LAMP POWER SUPPLY)
GND 1
ON/OFF
HG
HS
LG
LS
OCP
OVP
F/B
VCC 1
CN8004 10P :B-TO-B
TO GAC BOARD CN8401
B-SS1588<U/C>-GA.

*MARK LIST

US/CND/J MODEL		AEP MODEL
C8002	0.068 1.25kV	0.056 1.25kV
C8003	0.068 1.25kV	0.056 1.25kV



1
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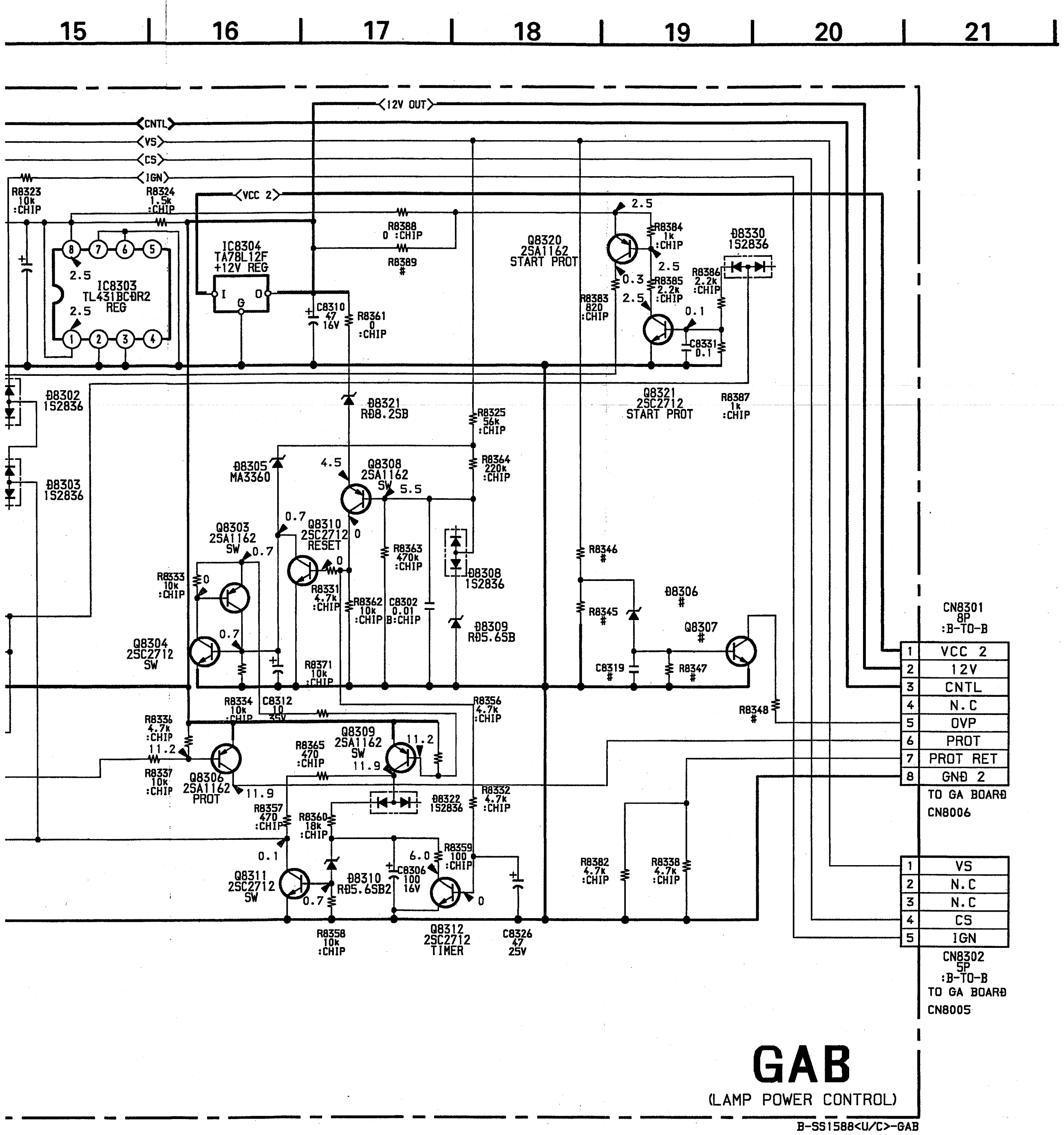
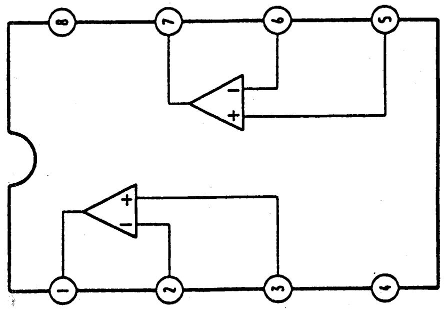
7
8
9
10
11
12
13
14
15
A
B
C
D
E
F
G
H
I
J
GAA
(100/200 SW)
Q8201 2SC2712 SW
C8207 0.1 25V B:CHIP
D8202 1SS123
Q8202 2SA1162 SW
C8202 100 6.3V
R8204 10k :CHIP
R8205 10k :CHIP
Q8203 2SC2712 SW
C8203 0.22 16V B:CHIP
R8207 10k :CHIP
R8208 10k :CHIP
Q8204 2SA1162 SW
R8209 10k :CHIP
D8201 ERA15-06
R8201 470k :RN
R8202 470k :RN
R8203 22k :RN-CP
R8220 470k :CHIP
R8221 470k :CHIP
R8222 470k :RN-CP
R8223 470k :RN-CP
R8224 47k :RN-CP
R8210 10k :CHIP
R8211 4.7k :CHIP
R8212 470k :CHIP
R8213 10k :CHIP
IC8201 µPC393G2 COMPARATOR
R8214 10k :CHIP
R8215 470k :CHIP
R8216 10k :CHIP
C8204 0.1 :MPS
C8205 0.1 :MPS
R8217 3.9k :RN-CP
R8218 4.7k :RN-CP
R8225 10k :RN-CP
C8206 47 16V
R8226 8.2k :CHIP
IC8202 TA78L09F +9V REG
+9V
R8227 4.7k :CHIP
R8228 470k :CHIP
R8229 150 :CHIP
R8232
Q8210 2SC2712 SW
C8210 22 25V
R8230 10k :CHIP
R8231 4.7k :CHIP
IC8203 µPC35862 COMPARATOR
C8201 2.2 400V
B-SS1588<U/C>-GAA
CN8201 8P :B-TO-B
AC
N.C
N.C
GND 1
CNTL 100/200
RY ON
VCC 1
GND 1
TO GA BOARD CN8001
GAA BOARD IC8201 µPC393G2
GAC (SWITCHING DRIVE)
TO GA BOARD CN8004
CN8401 10P :B-TO-B
GND 1
ON/OFF
HG
HS
LG
LS
OCP
OVP
F/B
VCC 1
T8401
D8401 1SS119
Q8401 2SB799 SWITCHING
R8404 1k :CHIP
C8402 0.0022 B:CHIP
R8402
R8406 10 1/4W :FPRD
C8404 0.001 :CHIP
R8424 22 :CHIP
R8425 470k :CHIP
D8402 1SS119
Q8402 2SB799 SWITCHING
R8405 1k :CHIP
C8403 0.0022 B:CHIP
R8403
R8407 10 1/4W :FPRD
C8405 0.001 :CHIP
C8401 0.1 25V B:CHIP
R8401 47 :CHIP
R8410 330k :CHIP
C8414 10 35V
RCS
CCS
CS
SVIN
ON/OFF
OVP
OUT1
VE
GND
S/T
RT1
CT
RT2
VREF
OUT2
VC
IC8401 CXA8038P DRIVE
R8412 39k :RN-CP
R8414 10k :RN-CP
TH8401
R8413 4.7k :CHIP
R8420 47k :RN-CP
R8418 :CHIP
R8421 0 :CHIP
R8426
C8420 0.1 25V B:CHIP
C8410 150p :CHIP
C8411 0.01 B:CHIP
RV8402
R8430 4.7k :RN-CP
C8413 0.22 25V F:CHIP
C8412 0.1 25V B:CHIP
D8403 RB441Q
D8404 RB441Q
R8408 10k :CHIP
C8406 1 16V F:CHIP
R8409 10 :CHIP
C8408 0.1 25V B:CHIP
C8407 0.0047 B:CHIP
B-SS1588<U/C>-GAC
CNTL
VS
CS
IGN
R8314 910 :RN-CP
RV8301
R8381 100k :RN-CP
R8313 100k :RN-CP
R8380 0 :CHIP
R8315 10k :RN-CP
R8317 10k :RN-CP
R8323 10k :CHIP
R8324 1.5k :CHIP
R8355 1k :CHIP
R8318 1.3k :RN-CP
C8309 10 16V
IC8303 TL431BC8R2 REG
R8309 680k :RN-CP
RV8302
R8350 2.2k :RN-CP
R8349 220 :RN-CP
R8316 390 :RN-CP
C8303 0.01 B:CHIP
C8304 0.0047 B:CHIP
R8372 10k :RN-CP
R8310 470k :RN-CP
C8305
C8307 0.22 16V B:CHIP
R8322 47k :CHIP
R8321 220
C8308 0.1 25V B:CHIP
C8323 0.1 25V B:CHIP
D8302 1S2836
D8303 1S2836
IC8301 µPC324G2 COMPARATOR
V-
V+
R8308 10k :RN-CP
R8327 220
R8328 100k :CHIP
D8301 1S2836
R8302 10k :CHIP
C8322
R8307 91k :RN-CP
D8307 1S2836
C8301 0.1 25V B:CHIP
D8320 1S2838
R8305
C8313
R8303 220k :RN-CP
R8304 9.1k :RN-CP
R8354 0 :CHIP
Q8314 2SA1162 SW
R8367 4.7k :CHIP
R8368 10k :CHIP
R8369 10k :CHIP
D8324 1S2838
Q8313 2SC2712 SW
D8323 1S2836
R8370 10k :CHIP
C8321 0.1 25V B:CHIP
R8351 4.7k :CHIP
R8342 180k :RN-CP
R8343
IC8305 NJM2904M COMPARATOR
R8344 4.7k :RN-CP
C8318
R8352 100k :CHIP
R8353 :CHIP
C8320 0.0047 B:CHIP
R8333 10k :CHIP
Q8304 2SC2712 SW
R8336 4.7k :CHIP
R8337 10k :CHIP
Q8306 2SA1162 PROT

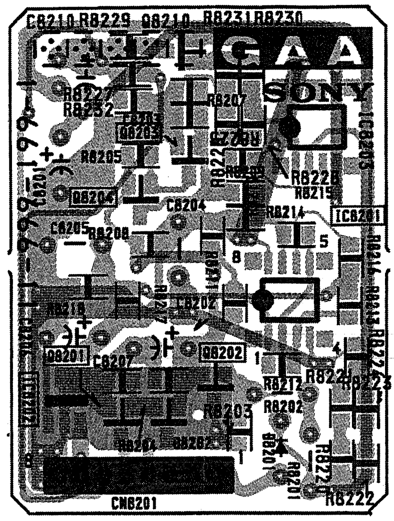

15
16
17
18
19
20
21
CNTL
VS
CS
IGN
12V OUT
VCC 2
IC8303 TL431BC8R2 REG
IC8304 TA78L12F +12V REG
Q8320 2SA1162 START PROT
Q8330 1S2836
Q8321 2SC2712 START PROT
Q8302 1S2836
Q8303 1S2836
D8321 RD8.2SB
Q8305 MA3360
Q8308 2SA1162 SW
Q8303 2SA1162 SW
Q8310 2SC2712 RESET
Q8304 2SC2712 SW
D8308 1S2836
D8309 RD5.6SB
D8306
Q8307
Q8306 2SA1162 PROT
Q8309 2SA1162 SW
D8322 1S2836
Q8311 2SC2712 SW
D8310 RD5.6SB2
Q8312 2SC2712 TIMER
CN8301 8P :B-TO-B
1 VCC 2
2 12V
3 CNTL
4 N.C
5 OVP
6 PROT
7 PROT RET
8 GND 2
TO GA BOARD CN8006
1 VS
2 N.C
3 N.C
4 CS
5 IGN
CN8302 5P :B-TO-B TO GA BOARD CN8005
GAB
(LAMP POWER CONTROL)
B-SS1588<U/C>-GAB

GAB BOARD IC8305 NJM2904M

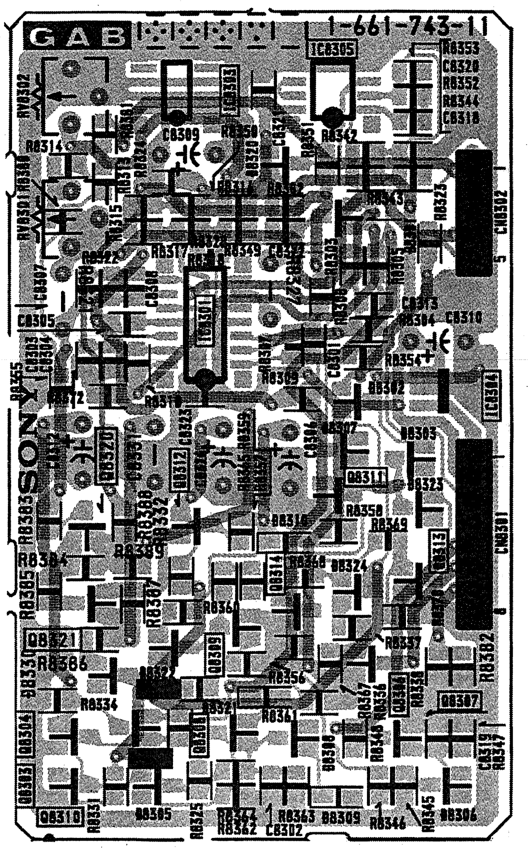


(US/Canadian Model) **GAA** [100/200 SW] **GAB** [LAMP POWER CONTROL] **GAC** [SWITCHING DRIVE]

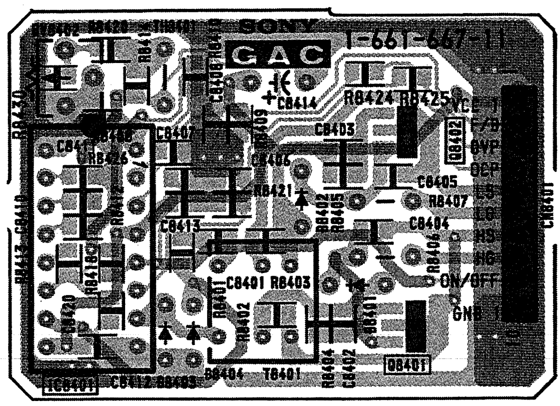
– GAA BOARD –


GAA
SONY
CN8201

– GAB BOARD –

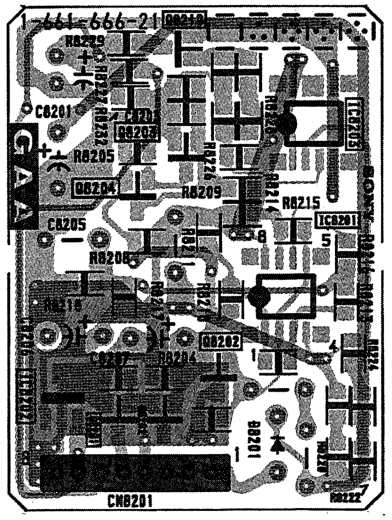

GAB
1-661-743-11
SONY

– GAC BOARD –

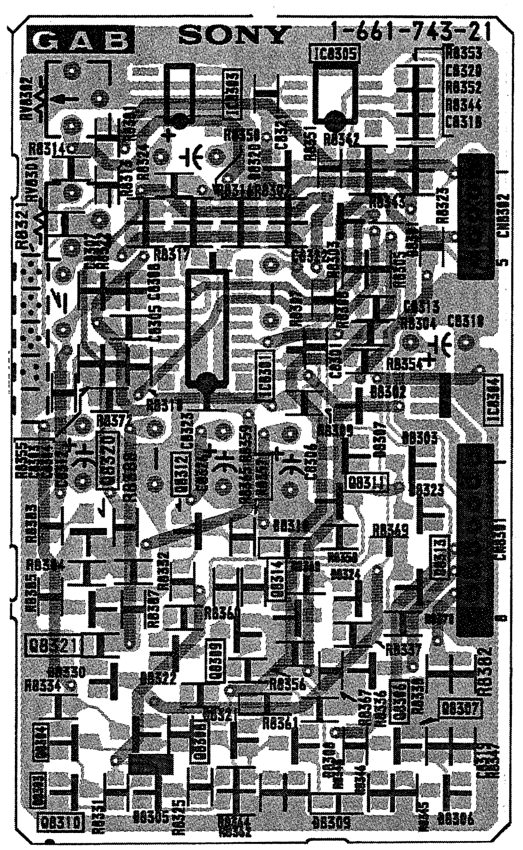

GAC
SONY
1-661-667-11

(AEP Model)

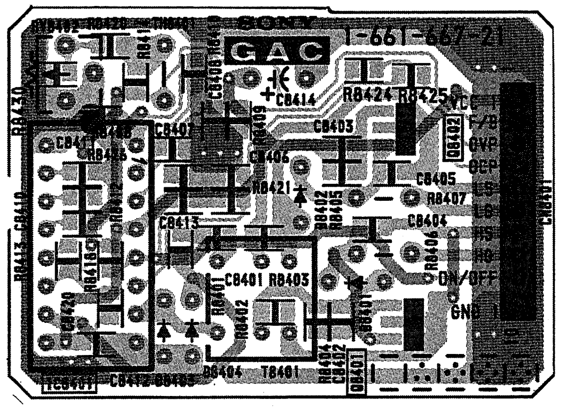
– GAA BOARD –


1-661-666-21
GAA
SONY
CN8201

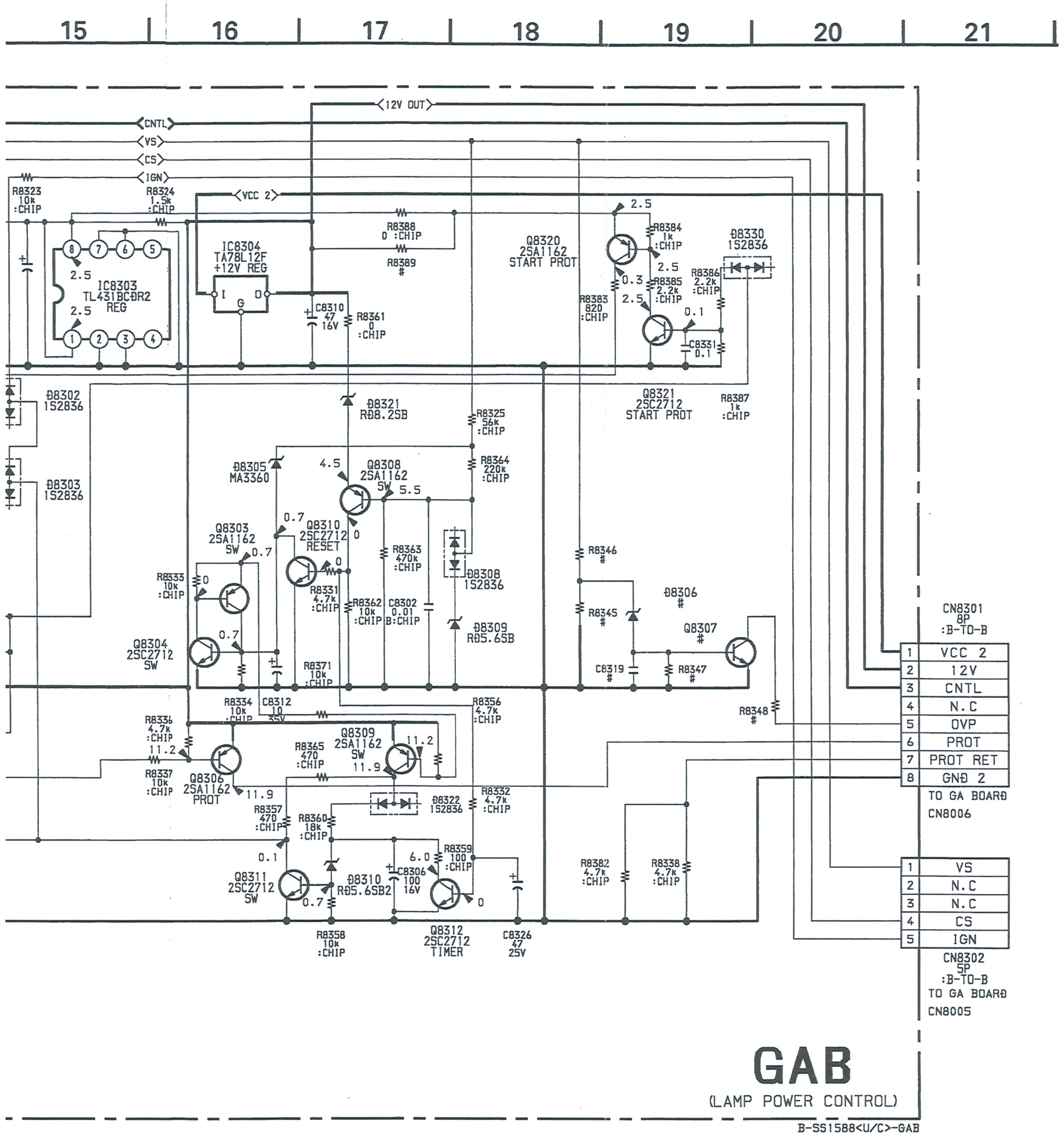
– GAB BOARD –


GAB
SONY
1-661-743-21

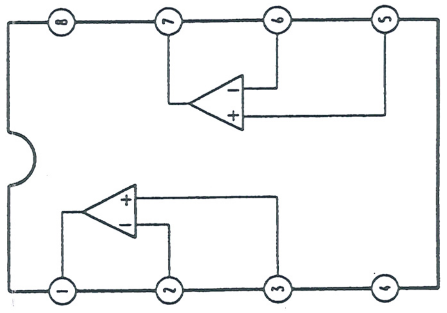
– GAC BOARD –


GAC
SONY
1-661-667-21

- ▨ : Pattern from the side which enables seeing.
- ▨ : Pattern of the rear side.

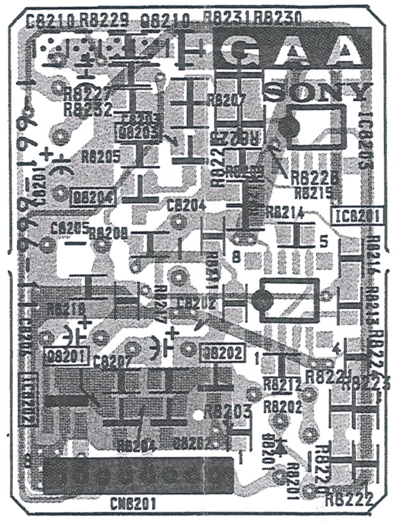

15
16
17
18
19
20
21
12V OUT
CNTL
VS
CS
IGN
VCC 2
R8323 10k :CHIP
R8324 1.5k :CHIP
IC8303 TL431BCDR2 REG
2.5
2.5
IC8304 TA78L12F +12V REG
I
G
O
C8310 47 16V
R8361 0 :CHIP
R8388 0 :CHIP
R8389 #
Q8320 2SA1162 START PROT
R8383 820 :CHIP
R8384 1k :CHIP
R8385 2.2k :CHIP
R8386 2.2k :CHIP
D8330 1S2836
C8331 0.1
Q8321 2SC2712 START PROT
R8387 1k :CHIP
2.5
0.3
0.1
D8302 1S2836
D8303 1S2836
D8321 RD8.2SB
D8305 MA3360
Q8308 2SA1162 SW
4.5
5.5
0
R8325 56k :CHIP
R8364 220k :CHIP
Q8303 2SA1162 SW
0.7
Q8310 2SC2712 RESET
R8363 470k :CHIP
D8308 1S2836
R8333 10k :CHIP
R8331 4.7k :CHIP
R8362 10k :CHIP
C8302 0.01 B:CHIP
D8309 RD5.6SB
Q8304 2SC2712 SW
R8371 10k :CHIP
R8346 #
R8345 #
D8306 #
Q8307 #
C8319 #
R8347 #
R8348 #
R8334 10k :CHIP
C8312 10 35V
R8356 4.7k :CHIP
R8336 4.7k :CHIP
11.2
R8337 10k :CHIP
Q8306 2SA1162 PROT
11.9
R8365 470 :CHIP
Q8309 2SA1162 SW
D8322 1S2836
R8332 4.7k :CHIP
R8357 470 :CHIP
R8360 18k :CHIP
R8359 100 :CHIP
6.0
C8306 100 16V
Q8311 2SC2712 SW
D8310 RD5.6SB2
Q8312 2SC2712 TIMER
R8358 10k :CHIP
C8326 47 25V
R8382 4.7k :CHIP
R8338 4.7k :CHIP
CN8301 8P :B-TO-B
1 VCC 2
2 12V
3 CNTL
4 N.C
5 OVP
6 PROT
7 PROT RET
8 GND 2
TO GA BOARD CN8006
1 VS
2 N.C
3 N.C
4 CS
5 IGN
CN8302 5P :B-TO-B
TO GA BOARD CN8005
GAB
(LAMP POWER CONTROL)
B-SS1588<U/C>-GAB

GAB BOARD IC8305 NJM2904M

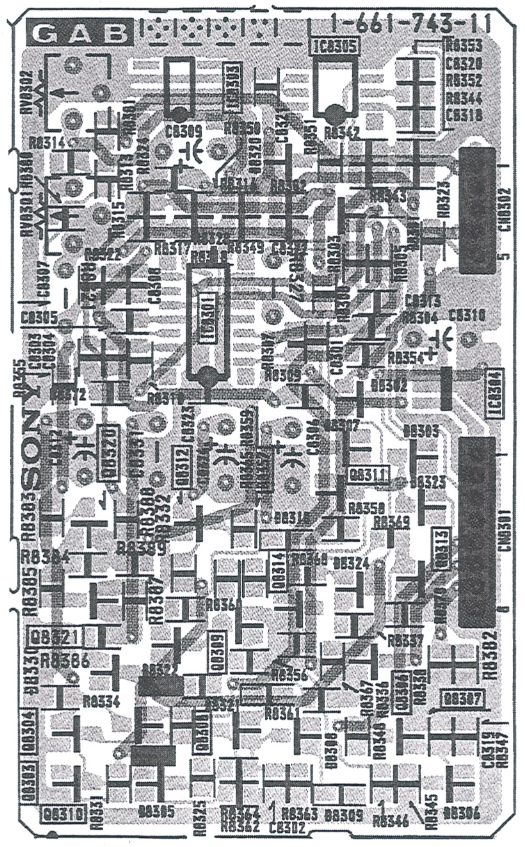


(US/Canadian Model) **GAA** [100/200 SW] **GAB** [LAMP POWER CONTROL] **GAC** [SWITCHING DRIVE]

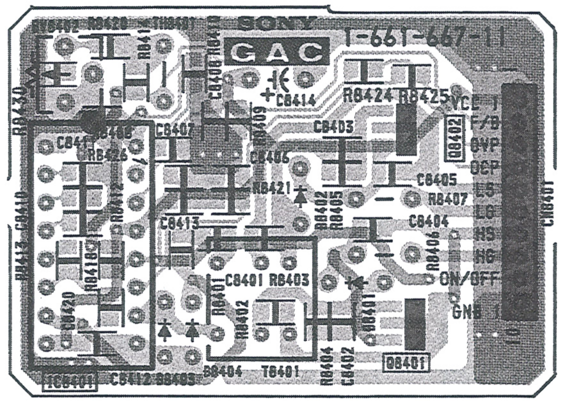
– GAA BOARD –


GAA
SONY
CN8201

– GAB BOARD –

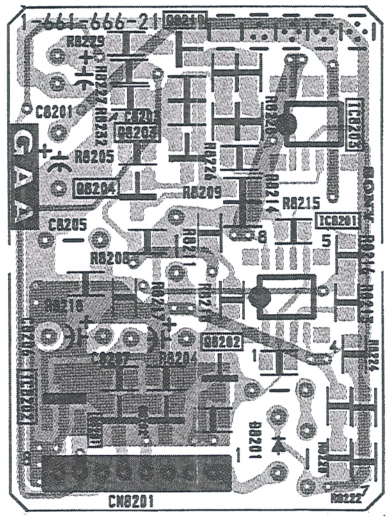

GAB
1-661-743-11
SONY
CN8301
CN8302

– GAC BOARD –

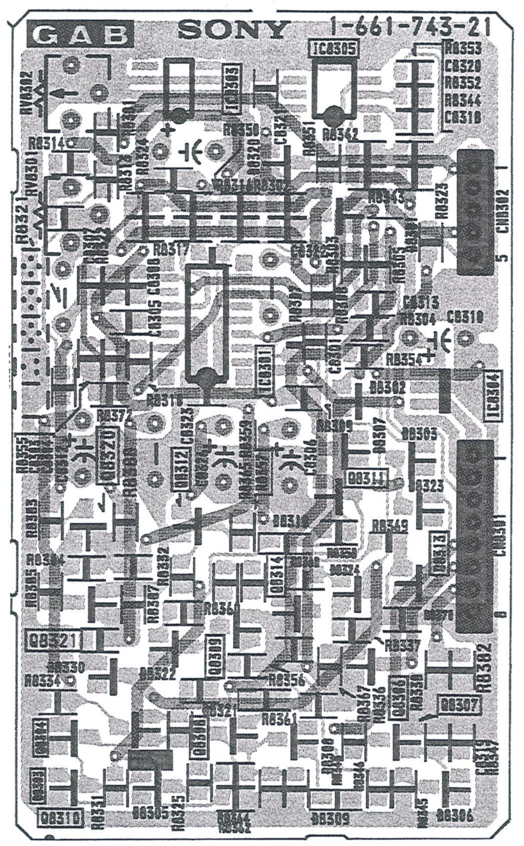

GAC
SONY
1-661-667-11
VCC
F/B
OVP
OCP
LS
HS
ON/OFF
GND
CN8401

(AEP Model)

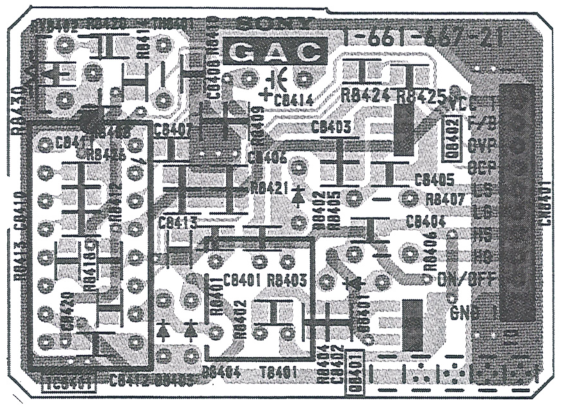
– GAA BOARD –


1-661-666-21
GAA
CN8201

– GAB BOARD –

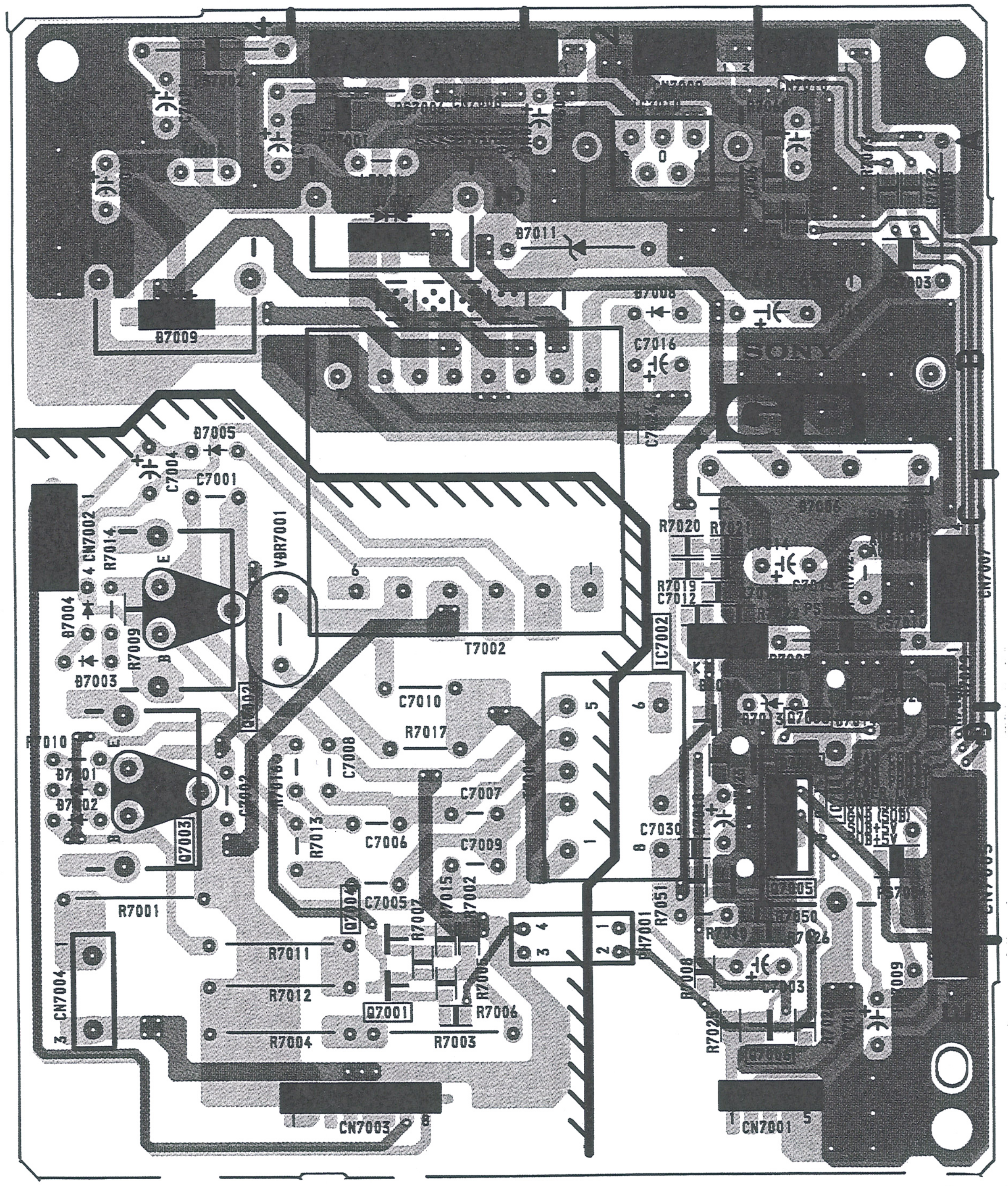

GAB
SONY
1-661-743-21
CN8301
CN8302

– GAC BOARD –

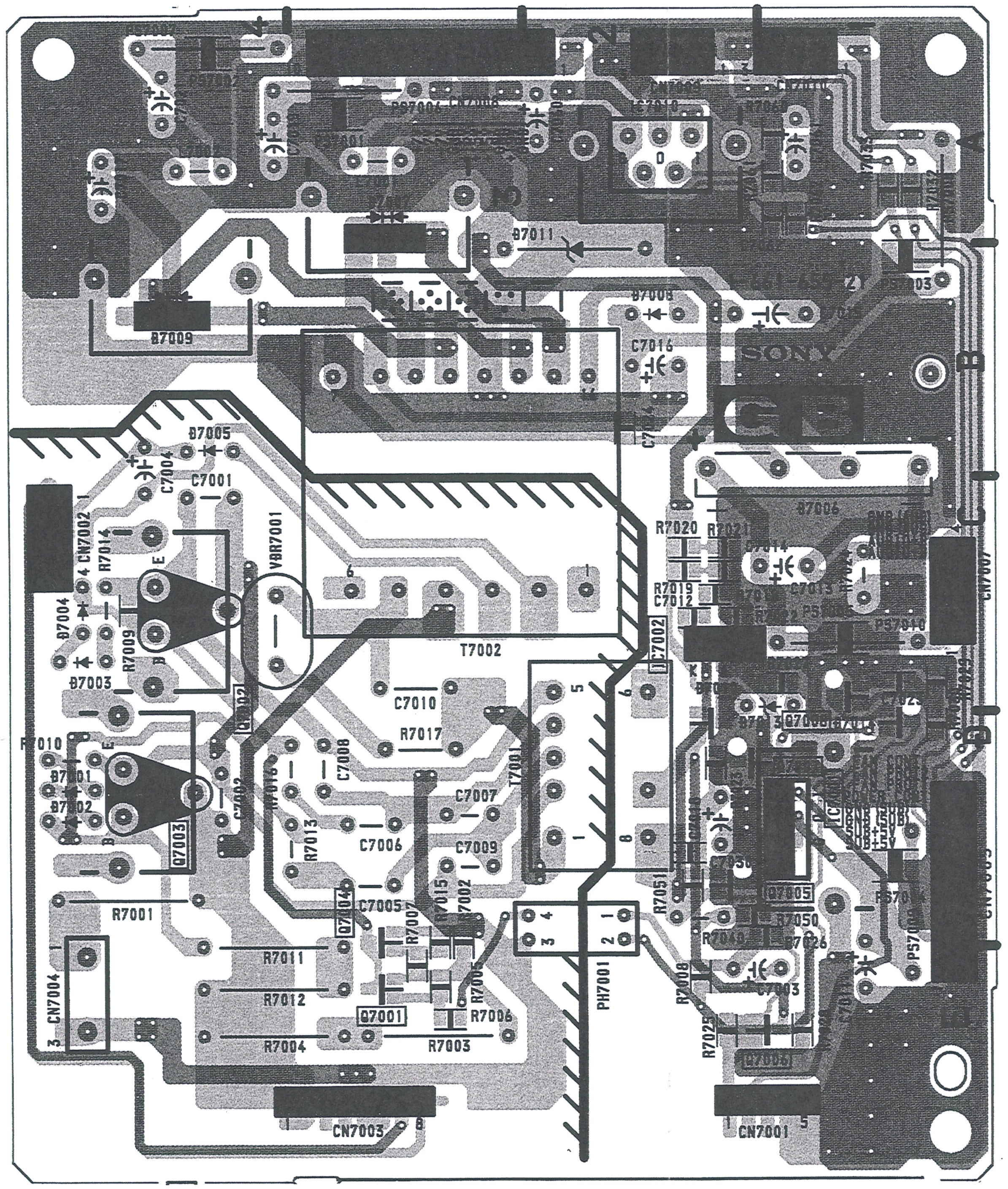

GAC
SONY
1-661-667-21
VCC
F/B
OVP
OCP
LS
HS
ON/OFF
GND
CN8401

- ▨ : Pattern from the side which enables seeing.
- ▩ : Pattern of the rear side.

– GB BOARD – (US/Canadian Model)


CN7001
CN7002
CN7003
CN7004
CN7007
T7002
IC7002
PH7001
Q7001
Q7003
Q7005
C7001
C7010
R7001
R7017
SONY
GB

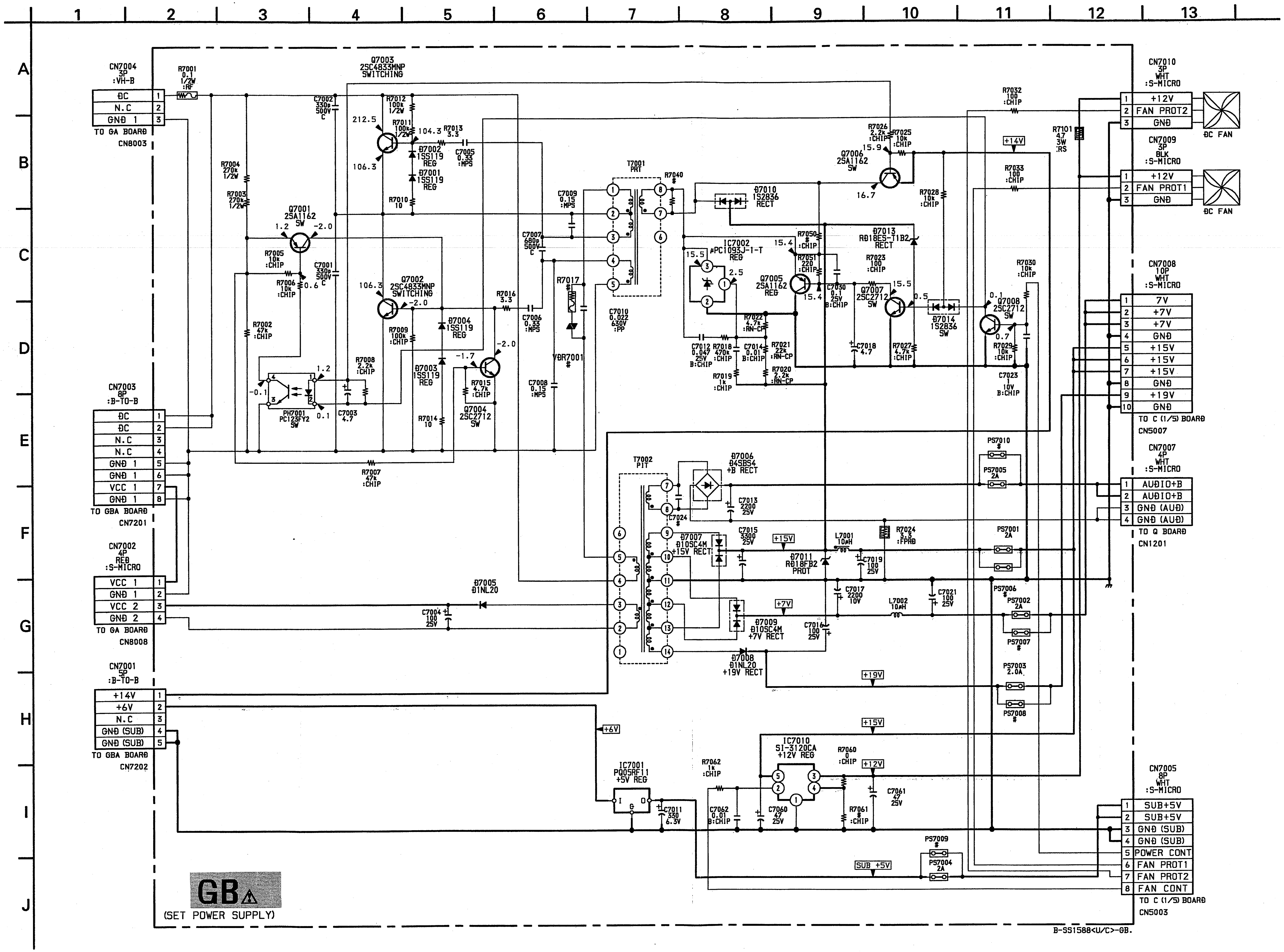
– GB BOARD – (AEP Model)


CN7001
CN7002
CN7003
CN7004
CN7007
T7002
IC7002
PH7001
Q7001
Q7003
Q7005
C7001
C7010
R7001
R7017
SONY
GB

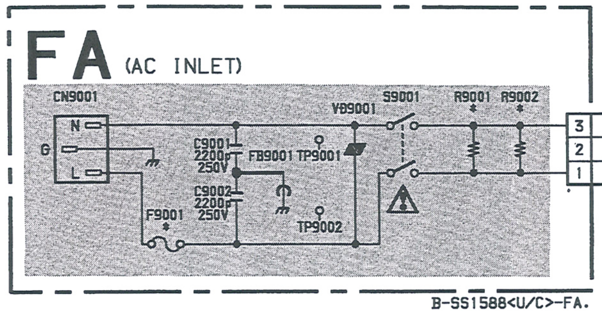
- ▨ : Pattern from the side which enables seeing.
- ■ : Pattern of the rear side.

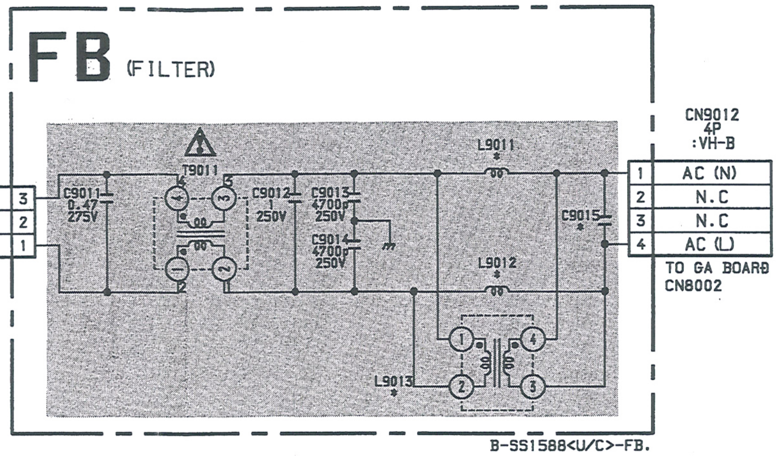
Schematic diagrams
← GAA, GAB, GAC boards

Schematic diagram
GB board →

GB
(SET POWER SUPPLY)
CN7004 3P :VH-B
DC
N.C
GND 1
TO GA BOARD CN8003
R7001 0.1 1/2W :RF
Q7003 2SC4833MNP SWITCHING
Q7001 2SA1162 SW
Q7002 2SC4833MNP SWITCHING
Q7004 2SC2712 SW
PH7001 PC123FY2 SW
D7001 1SS119 REG
D7002 1SS119 REG
D7003 1SS119 REG
D7004 1SS119 REG
VDR7001
T7001 PRT
T7002 PIT
D7005 D1NL20
D7006 D4SB54 +B RECT
D7007 D10SC4M +15V RECT
D7008 D1NL20 +19V RECT
D7009 D10SC4M +7V RECT
D7010 1S2836 RECT
D7011 RD18FB2 PROT
D7013 RD18ES-T1B2 RECT
D7014 1S2836 SW
IC7002 PC1093J-1-T REG
Q7005 2SA1162 REG
Q7006 2SA1162 SW
Q7007 2SC2712 SW
Q7008 2SC2712 SW
IC7001 PQ05RF11 +5V REG
IC7010 SI-3120CA +12V REG
L7001 10µH
L7002 10µH
CN7003 8P :B-TO-B
DC
DC
N.C
N.C
GND 1
GND 1
VCC 1
GND 1
TO GBA BOARD CN7201
CN7002 4P RED :S-MICRO
VCC 1
GND 1
VCC 2
GND 2
TO GA BOARD CN8008
CN7001 5P :B-TO-B
+14V
+6V
N.C
GND (SUB)
GND (SUB)
TO GBA BOARD CN7202
CN7010 3P WHT :S-MICRO
+12V
FAN PROT2
GND
DC FAN
CN7009 3P BLK :S-MICRO
+12V
FAN PROT1
GND
DC FAN
CN7008 10P WHT :S-MICRO
7V
+7V
+7V
GND
+15V
+15V
+15V
GND
+19V
GND
TO C (1/5) BOARD CN5007
CN7007 4P WHT :S-MICRO
AUDIO+B
AUDIO+B
GND (AUD)
GND (AUD)
TO Q BOARD CN1201
CN7005 8P WHT :S-MICRO
SUB+5V
SUB+5V
GND (SUB)
GND (SUB)
POWER CONT
FAN PROT1
FAN PROT2
FAN CONT
TO C (1/5) BOARD CN5003
+14V
+15V
+7V
+19V
+6V
+12V
SUB +5V
PS7001 2A
PS7002 2A
PS7003 2.0A
PS7004 2A
PS7005 2A
PS7006
PS7007
PS7008
PS7009
PS7010
R7101 4.7 3W :RS
R7024 3.3 :FPRD
B-SS1588<U/C>-GB.
1
2
3
4
5
6
7
8
9
10
11
12
13
A
B
C
D
E
F
G
H
I
J

FA [AC INLET] FB [FILTER]


FA (AC INLET)
CN9001
S9001
R9001 *
R9002 *
VB9001
C9001 2200p 250V
FB9001
TP9001
C9002 2200p 250V
F9001 *
TP9002
CN9002 3P :VH-B
3 AC (N)
2 N.C
1 AC (L)
B-SS1588<U/C>-FA.


FB (FILTER)
CN9011 3P :VH-B
AC (N) 3
N.C 2
AC (L) 1
C9011 0.47 275V
T9011
C9012 1 250V
C9013 4700p 250V
C9014 4700p 250V
L9011 *
L9012 *
C9015 *
L9013 *
CN9012 4P :VH-B
1 AC (N)
2 N.C
3 N.C
4 AC (L)
TO GA BOARD CN8002
B-SS1588<U/C>-FB.

*MARK LIST

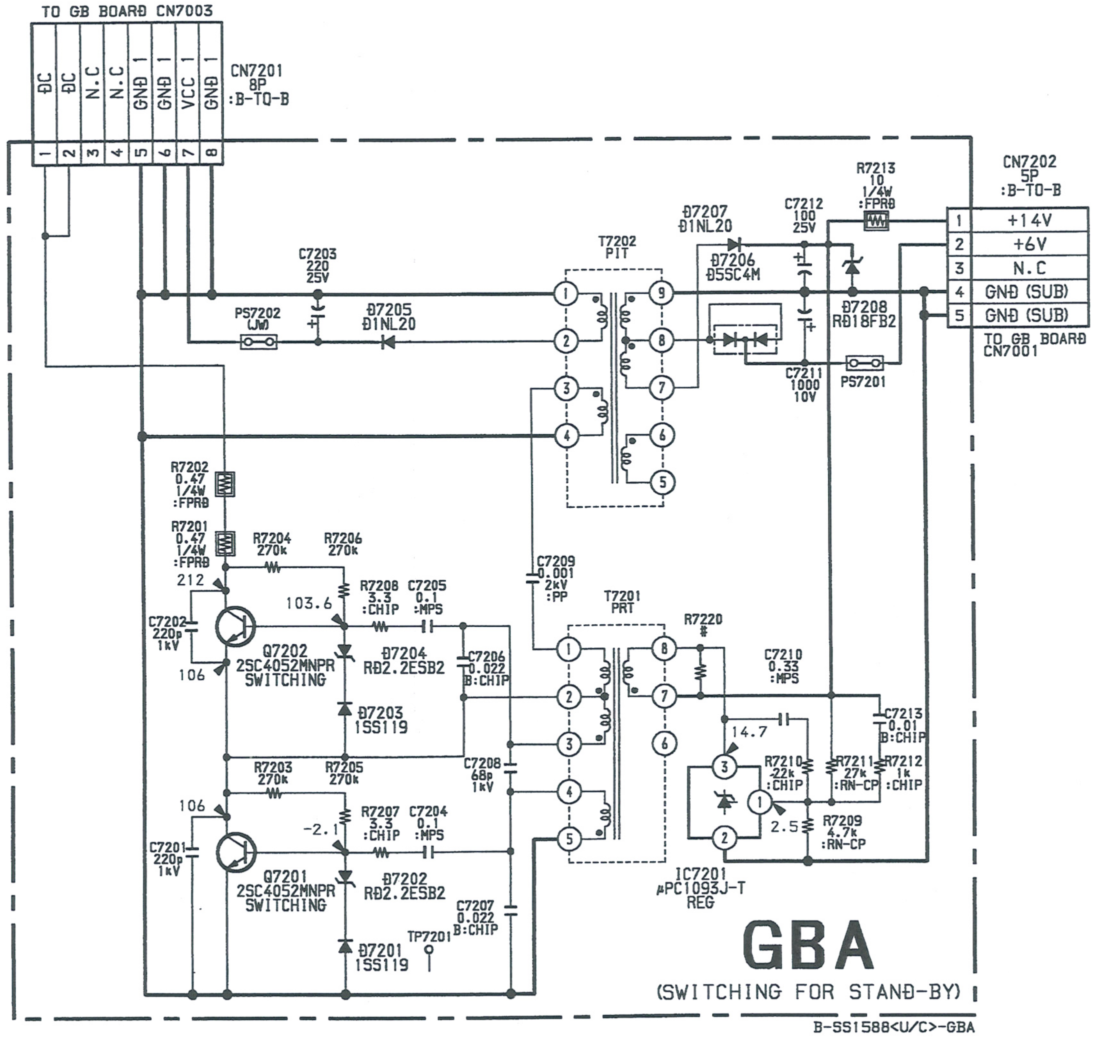
	US/CND/J MODEL	AEP MODEL
F9001	10A	6.3A
R9001	680K 1/2W :RC	330K 1/2W :RC
R9002	680K 1/2W :RC	330K 1/2W :RC

*MARK LIST

	AEP MODEL	US/CND/J MODEL
C9015	2.2 250V :PP	#
L9011	#	150uH 141191511
L9012	#	150uH 141191511
L9013	5mH 141596711	#

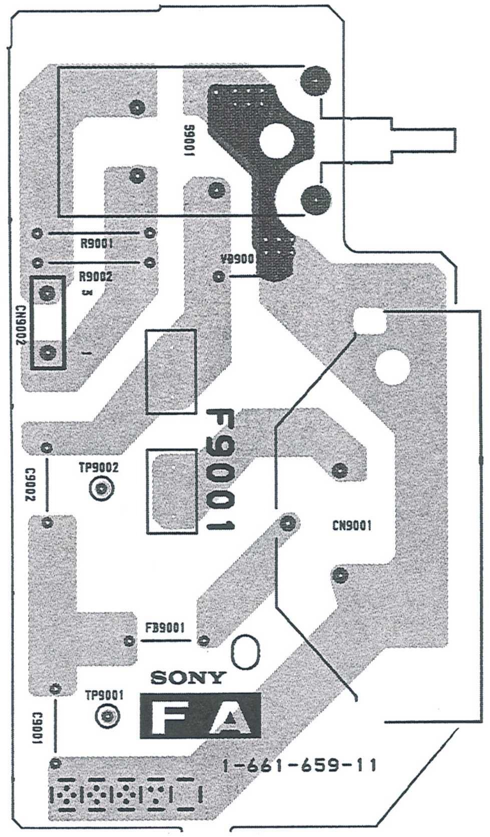
#mark:not mounted

● ▒ : Pattern from the side which enables seeing.
● ■ : Pattern of the rear side.

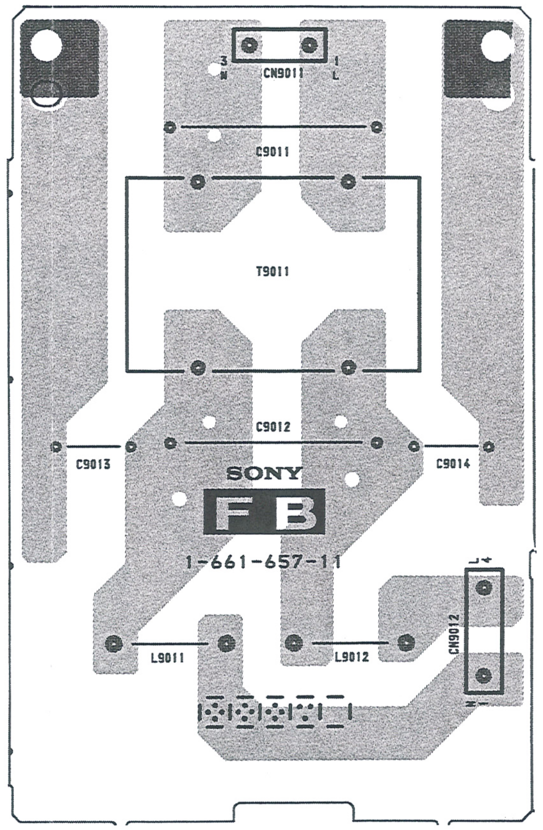

TO GB BOARD CN7003
CN7201 8P :B-TQ-B
DC
DC
N.C
N.C
GND
GND
VCC
GND
CN7202 5P :B-TQ-B
1 +14V
2 +6V
3 N.C
4 GND (SUB)
5 GND (SUB)
TO GB BOARD CN7001
PS7202
C7203 220 25V
D7205 D1NL20
T7202 PIT
D7207 D1NL20
D7206 D5SC4M
C7212 100 25V
R7213 10 1/4W :FPRD
D7208 RD18FB2
C7211 1000 10V
PS7201
R7202 0.47 1/4W :FPRD
R7201 0.47 1/4W :FPRD
R7204 270k
R7206 270k
R7208 3.3 :CHIP
C7205 0.1 :MPS
C7202 220p 1kV
Q7202 2SC4052MNPR SWITCHING
D7204 RD2.2ESB2
C7206 0.022 B:CHIP
D7203 1SS119
C7209 0.001 2kV :PP
T7201 PRT
R7220
C7210 0.33 :MPS
C7213 0.01 B:CHIP
R7210 22k :CHIP
R7211 27k :RN-CP
R7212 1k :CHIP
R7209 4.7k :RN-CP
C7208 68p 1kV
R7203 270k
R7205 270k
R7207 3.3 :CHIP
C7204 0.1 :MPS
C7201 220p 1kV
Q7201 2SC4052MNPR SWITCHING
D7202 RD2.2ESB2
C7207 0.022 B:CHIP
TP7201
D7201 1SS119
IC7201 μPC1093J-T REG
GBA
(SWITCHING FOR STAND-BY)
B-SS1588<U/C>-GBA

(US/Canadian Model)

– FA BOARD –

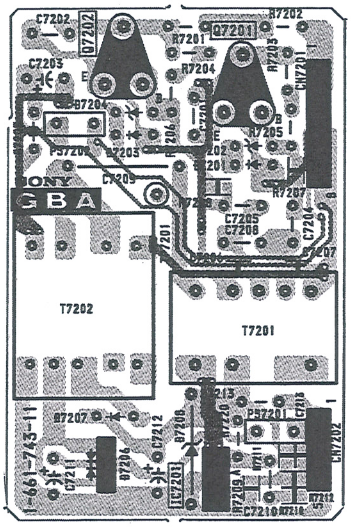

CN9001
R9001
R9002
CN9002
VB9001
F9001
TP9002
C9002
FB9001
TP9001
C9001
SONY
FA
1-661-659-11

– FB BOARD –


CN9011
C9011
T9011
C9012
C9013
C9014
SONY
FB
1-661-657-11
L9011
L9012
CN9012

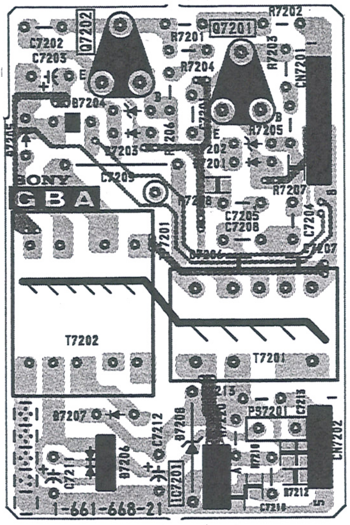
GBA [SWITCHING FOR STAND-BY]

– GBA BOARD – (US/Canadian Model)



C7202
Q7202
R7202
Q7201
R7201
C7203
R7204
R7203
CN7201
D7204
R7205
PS7202
D7203
C7209
R7207
GBA
C7205
C7208
C7204
C7207
T7202
T7201
D7207
D7213
PS7201
C7212
D7206
IC7201
C7211
CN7202
R7212
C7210
1-661-743-11

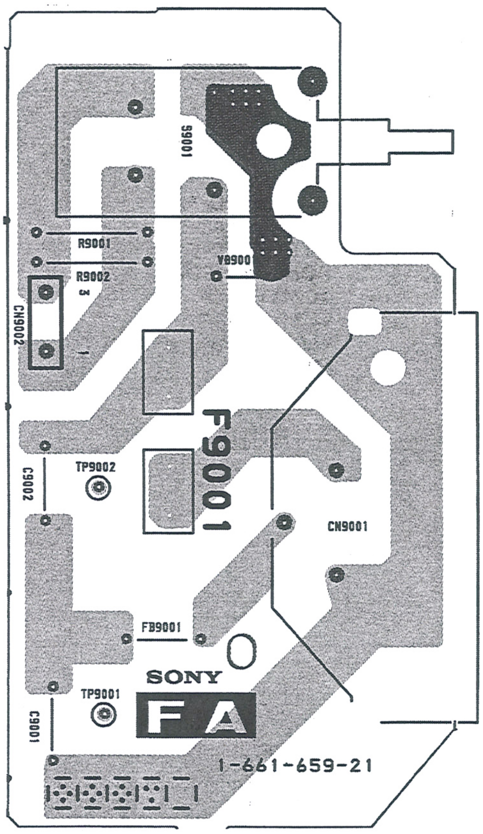
– GBA BOARD – (AEP Model)



C7202
Q7202
R7202
Q7201
R7201
C7203
R7204
R7203
CN7201
D7204
R7205
D7203
C7209
R7207
GBA
C7205
C7208
C7204
C7207
T7202
T7201
D7207
PS7201
C7212
D7206
IC7201
C7211
CN7202
R7212
C7210
1-661-668-21

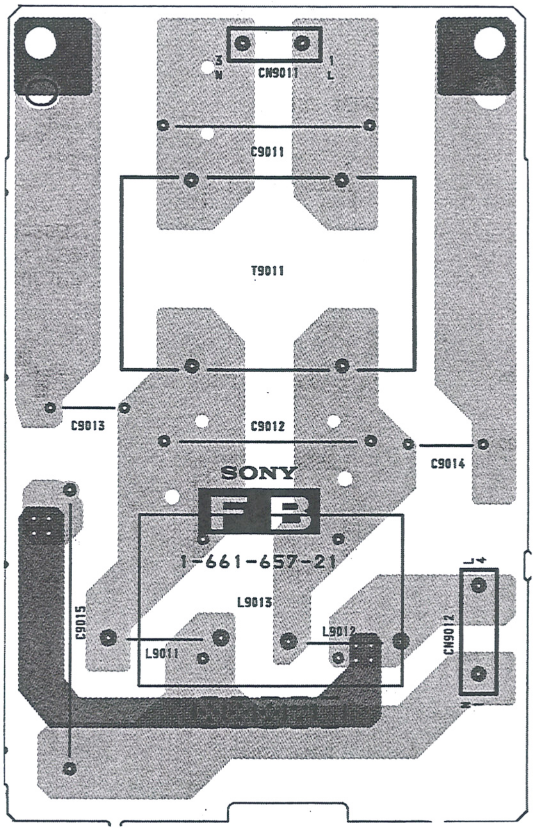
(AEP Model)

– FA BOARD –



S9001
R9001
R9002
VR9001
CN9002
F9001
TP9002
C9002
CN9001
FB9001
SONY
FA
TP9001
C9001
1-661-659-21

– FB BOARD –

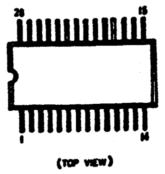


CN9011
C9011
T9011
C9013
C9012
C9014
SONY
FB
1-661-657-21
L9013
C9015
L9011
L9012
CN9012

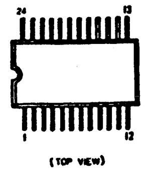
Schematic diagrams
← FA, FB, GBA boards

5-5. SEMICONDUCTORS

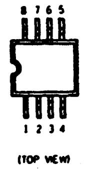
AT28HC64B-90SC-TP
CXD2053S


28
15
1
14
(TOP VIEW)

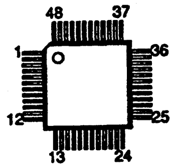
BA7657F-E2


24
13
1
12
(TOP VIEW)

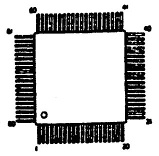
CXA1211M
LM358PS
MM1112XFF
NJM2235M
NJM2240M
NJM2904M
TL431BCDR2
μPC358G2
μPC393G2
μPC4082G2


8 7 6 5
1 2 3 4
(TOP VIEW)

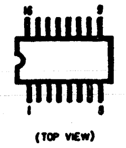
CXA1839Q-T6
CXA1855Q-T6
CXA2011Q
CXD1178Q


48
37
1
36
12
25
13
24

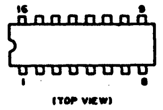
CXA1853AQ
HD6433337WA08F



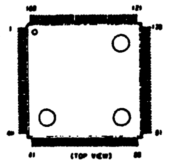
CXA1875AM-T4
HD14053BFP
JLC1562BFL2
MC14053BF-T2
MC74HC157AF
MM1231XFFK
PC74HC00D-T
TDA4665T-T
TC74HC123AF


16
9
1
8
(TOP VIEW)

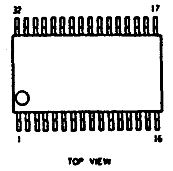
CXA8038P


16
9
1
8
(TOP VIEW)

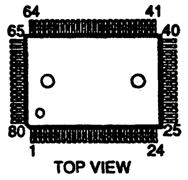
CXD108-143Q



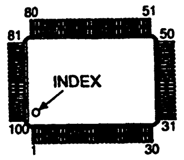
CXD1176Q


32
17
1
16
TOP VIEW

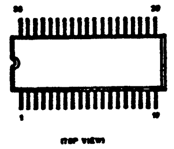
CXD2024AQ


64
41
65
40
80
25
24
TOP VIEW

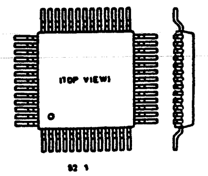
CXD2412AQ
CXD2428Q


80
51
81
50
INDEX
100
31
1
30

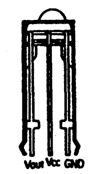
CXK1206AM



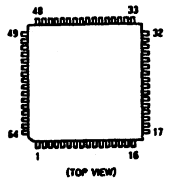
CY7C136-55JC



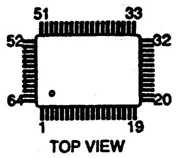
GP1U28X


Vout
Vcc
GND

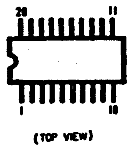
HD6473257CP-W400-V1.0


48
33
49
32
64
17
1
16
(TOP VIEW)

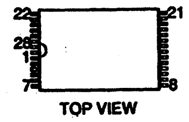
MB654842UPF
MB671469PF
MB90091APF-SX1588


51
33
52
32
64
20
1
19
TOP VIEW

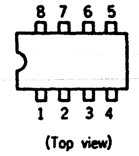
MB88346BPFV
M62393F-600D
TDA7315D013TR


20
11
1
10
(TOP VIEW)

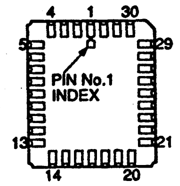
MC68HC05P7BSC402191B


22
21
28
1
7
8
TOP VIEW

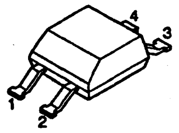
MM1170BFB


8 7 6 5
1 2 3 4
(Top view)

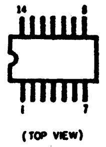
M27C2001
M27C512-90C1


4
1
30
5
29
PIN No.1
INDEX
13
21
14
20

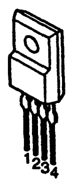
PC123F2
PC123FY2



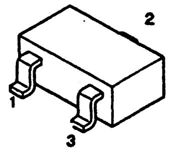
PC74HC02D-T
PC74HC126D-T
PC74HC32D-T
PC74HC4066D-T
TC74VHC04F
TC74VHC14F
TLC2932IPW
μPC324G2


14
8
1
7
(TOP VIEW)

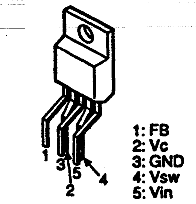
PQ05RF11



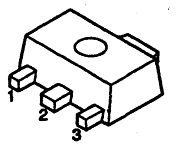
PQ05SZ1U



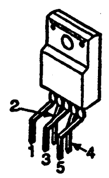
PQ20VZ5U


1
3
5
4
2
1: FB
2: Vc
3: GND
4: Vsw
5: Vin

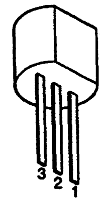
RH5VA51-AA



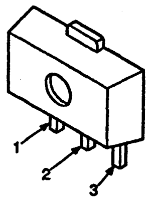
SI-3120C
SI-3120CA



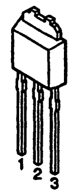
TA78L09F-TE12L
TA78L09F-T1



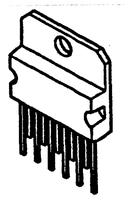
TA78L12F



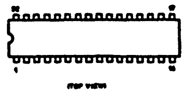
TA78M09F



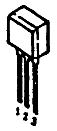
TDA2009A



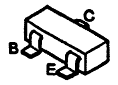
TDA9141-N2C



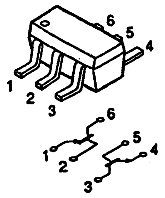
μPC1093J-T
μPC1093J-1-T



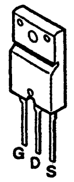
DTC144EKA
DTC314TK
2SA1162-G
2SA1162-YG
2SC2712-YG
2SD601A-Q



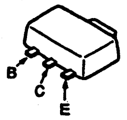
HN1B01FU-TE85R


6
5
4
1
2
3
6
1
2
5
4
3

IRFI-840



2SB799-ML



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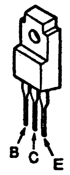

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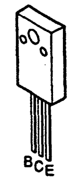

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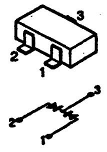

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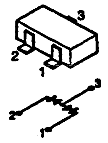

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DTZ-TT11-5.6B
DTZ-TT11-8.2B
DTZ15B
DTZ4.7C
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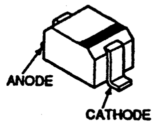
1T363-04
RD10SB
RD5.6SB
RD8.2SB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CATHODE

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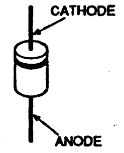
RD120E-T1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ANODE

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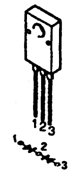

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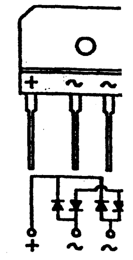

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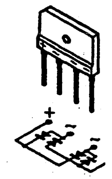

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RB441QT
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RD2.2ES-B2
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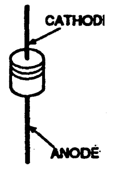

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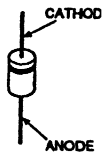

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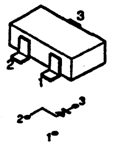
RD36M-B



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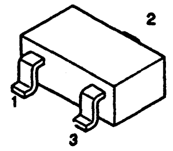

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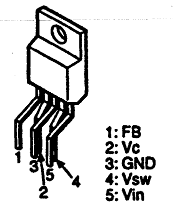
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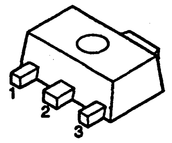
2: Vc
3: GND
4: Vsw
5: Vin
1
3
5
2
4

RH5VA51-AA



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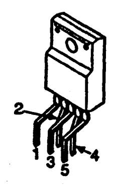

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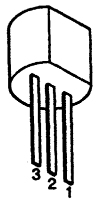

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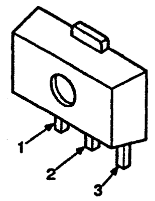

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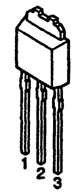

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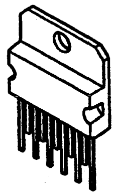

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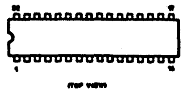

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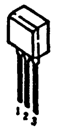

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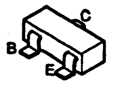
2SC2712-YG
2SD601A-Q



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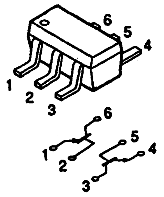

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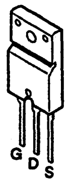

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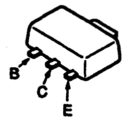

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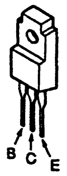

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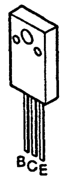

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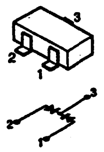

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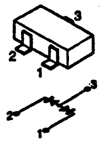

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DTZ-TT11-5.6B
DTZ-TT11-8.2B
DTZ15B
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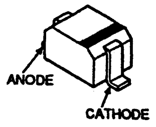
RD10SB
RD5.6SB
RD8.2SB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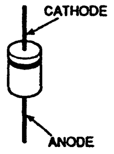
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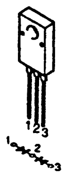

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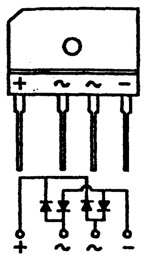

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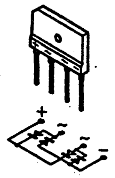

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RB441QT
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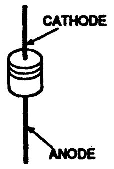
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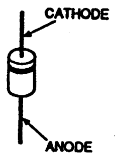
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ANODE

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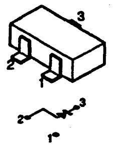

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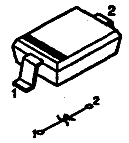

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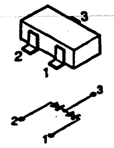

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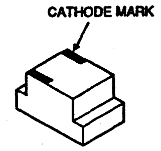
SEL1401C
SEL1801C
SEL1901C


CATHODE MARK

SECTION 6

EXPLODED VIEWS

The componants identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

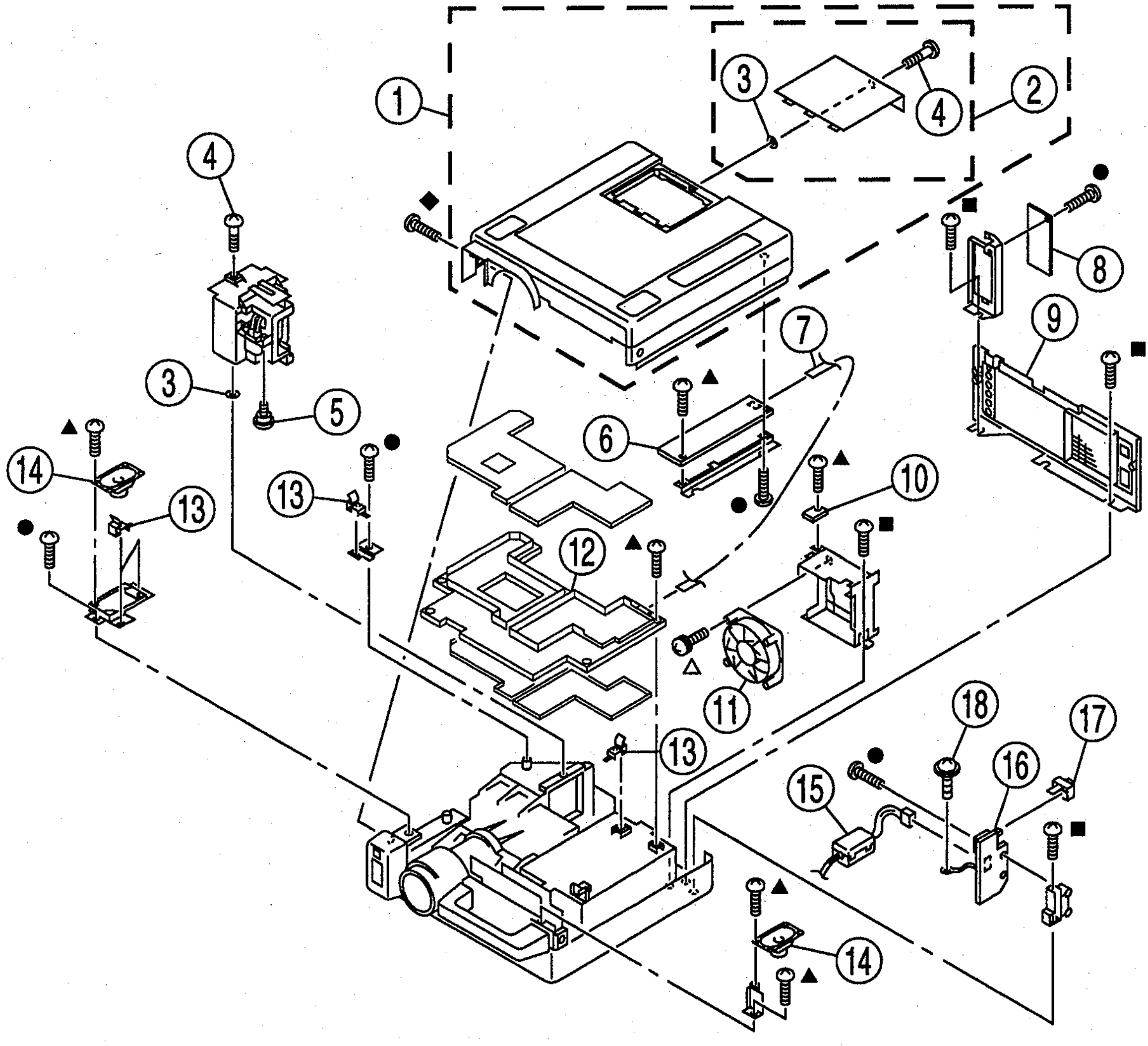
Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite.
Ne les remplacer que par une piece portant le numero specifie.

NOTE:

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

6-1. CHASSIS 1

●	7-685-648-79	+BVTP 3X12
■	7-685-663-79	TAPPING SCREW (DIA.4X11)
◆	7-682-548-09	+B 3X8
▲	7-682-548-04	+P 3X8
△	7-682-968-01	+PSW 4X30



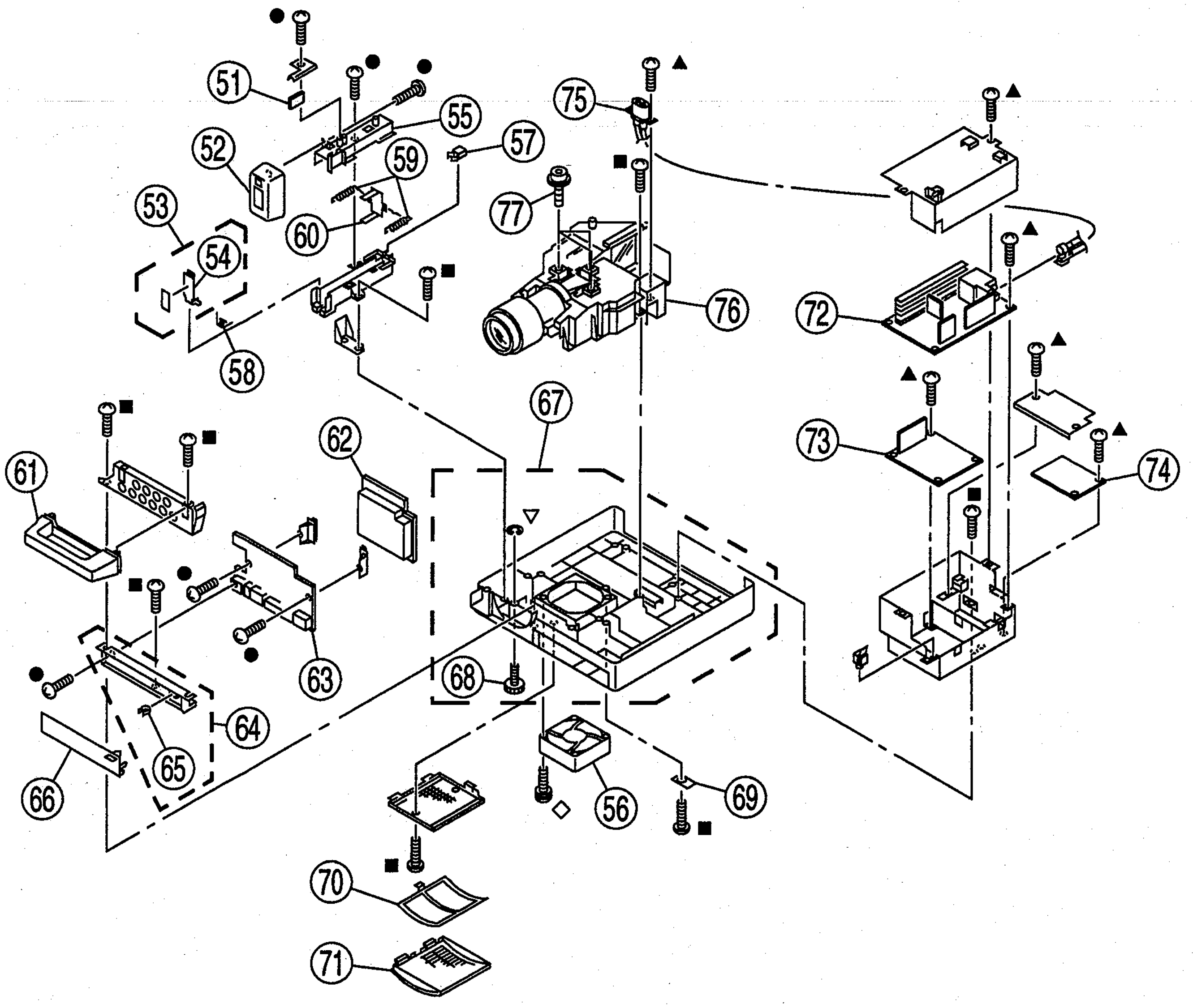
REF. NO.	PART NO.	DESCRIPTION	REMARK
1	* X-4033-905-2	CABINET ASSY	2~4
2	* X-4033-813-1	DOOR ASSY, LAMP	3,4
3	* 3-715-526-01	WASHER (M3)	
4	4-396-203-01	SCREW (+B M3X12), PREVENTION	
5	4-054-855-01	SCREW (+PWH M3X10), MACHINE	
6	* A-1375-157-A	H BOARD, COMPLETE	
7	1-900-222-35	CONNECTOR ASSY, FLAT 13P	
8	* A-1390-662-A	NR BOARD, COMPLETE	
9	* X-4033-902-1	PANEL ASSY, REAR	
10	A-1373-602-A	U BOARD, COMPLETE	
11	1-698-819-11	FAN, DC	
12	* A-1335-073-A	C BOARD, COMPLETE	
13	* 3-696-440-11	HOLDER (B), PC BOARD	
14	1-505-398-11	SPEAKER (7X4CM)	
15	1-543-827-11	CLAMP, SLEEVE FEPRITE	
16	A-1501-106-A	FA ASSY (VPL-W400Q)	
	A-1501-107-A	FA ASSY (VPL-W40QM)	
17	4-054-883-01	BUTTON, POWER	
18	3-701-810-21	SCREW, TERMINAL	

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite.
Ne les remplacer que par une piece portant le numero specifie.

6-2. CHASSIS 2

●	7-685-648-79	+BVTP 3X12
■	7-685-663-79	TAPPING SCREW (DIA.4X16)
▲	7-682-548-04	+P 3X8
◇	7-682-670-09	+PSW 4X40
▽	7-624-109-04	STOP RING 5.0 TYPE-E



REF. NO.	PART NO.	DESCRIPTION	REMARK
51	* A-1390-664-A	NF BOARD, COMPLETE	
52	* X-4033-899-1	CAP ASSY, FRONT	
53	* X-4033-898-1	DOOR ASSY, RMC BOX	54
54	* 4-054-880-01	DOOR, RMC BOX	
55	* X-4033-858-1	BOX (UPPER LID) ASSY, RMC	
56	1-698-818-11	FAN, DC	
57	4-047-464-01	CATCHER, PUSH	
58	* 4-054-847-01	SPRING (A), RMC BOX	
59	* 4-054-867-01	SPRING (B), RMC BOX	
60	* 4-054-876-01	SLIDER, RMC BOX	
61	* 4-054-900-11	HANDLE	
62	* A-1135-871-A	B BOARD, COMPLETE	
63	* A-1275-139-A	Q BOARD, COMPLETE	
64	* X-4033-901-1	PANEL ASSY, CONNECTOR	65
65	3-703-574-00	RETAINER, DOOR	
66	* X-4033-900-1	DOOR ASSY, CONNECTOR	
67	* X-4033-904-1	BASE ASSY	68
68	4-054-854-01	ADJUSTOR	
69	A-1342-317-A	V BOARD, COMPLETE	
70	* 4-054-906-01	FILTER	
71	4-054-913-01	COVER, FILTER	
72	⚠ A-1316-297-A	GA BOARD, COMPLETE (VPL-W400QM)	
	⚠* A-1316-276-A	GA BOARD, COMPLETE (VPL-W400Q)	
73	⚠* A-1316-280-A	GB BOARD, COMPLETE	
74	A-1241-281-A	FB BOARD, COMPLETE (VPL-W400Q)	
	A-1241-282-A	FB BOARD, COMPLETE (VPL-W400QM)	
75	1-900-222-43	CONNECTOR ASSY, LAMP SOCKET	
76	1-473-848-21	OPTICAL UNIT	
77	4-055-912-01	BOLT (M3), HEXAGON WITH WASHER	

SECTION 7
ELECTRICAL PARTS LIST

B

NOTE:

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

The componants identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

- The components identified by ⊠ in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

RESISTORS
- All resistors are in ohms
- F : nonflammable

When indicating parts by reference number, please include the board name.

- CAPACITORS
  PF : μμ F
- There are some cases the reference number on one board overlaps on the other board. Therefore, when ordering parts by the reference number, please include the board name.

REF. NO.	PART NO.	DESCRIPTION			REMARK
	* A-1135-871-A	B BOARD, COMPLETE **********************			
		<CAPACITOR>			
C3001	1-124-779-00	ELECT	10MF	20%	16V
C3002	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3003	1-126-603-11	ELECT	4.7MF	20%	35V
C3004	1-126-206-11	ELECT	100MF	20%	6.3V
C3005	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3006	1-126-206-11	ELECT	100MF	20%	6.3V
C3007	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3010	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3100	1-104-852-11	TANTAL. CHIP	22MF	20%	10V
C3103	1-135-210-11	TANTAL. CHIP	4.7MF	20%	10V
C3104	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3105	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3106	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3107	1-104-913-11	TANTAL. CHIP	10MF	20%	16V
C3108	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3109	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3110	1-104-913-11	TANTAL. CHIP	10MF	20%	16V
C3111	1-104-913-11	TANTAL. CHIP	10MF	20%	16V
C3112	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C3113	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C3114	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C3130	1-104-852-11	TANTAL. CHIP	22MF	20%	10V
C3133	1-135-210-11	TANTAL. CHIP	4.7MF	20%	10V
C3134	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3135	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3136	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3137	1-104-913-11	TANTAL. CHIP	10MF	20%	16V
C3138	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3139	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3140	1-104-913-11	TANTAL. CHIP	10MF	20%	16V
C3141	1-104-913-11	TANTAL. CHIP	10MF	20%	16V
C3160	1-104-852-11	TANTAL. CHIP	22MF	20%	10V
C3163	1-135-210-11	TANTAL. CHIP	4.7MF	20%	10V
C3164	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3165	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3166	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3167	1-104-913-11	TANTAL. CHIP	10MF	20%	16V
C3168	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3169	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3170	1-104-913-11	TANTAL. CHIP	10MF	20%	16V
C3171	1-104-913-11	TANTAL. CHIP	10MF	20%	16V
C3280	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3281	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3282	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3283	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3300	1-104-913-11	TANTAL. CHIP	10MF	20%	16V
C3301	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3302	1-104-913-11	TANTAL. CHIP	10MF	20%	16V
C3303	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3304	1-163-091-00	CERAMIC CHIP	8PF	0.25PF	50V
C3305	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3306	1-124-779-00	ELECT	10MF	20%	16V
C3380	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3381	1-126-206-11	ELECT	100MF	20%	6.3V
C3382	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C3402	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3403	1-126-206-11	ELECT	100MF	20%	6.3V
C3404	1-163-037-11	CERAMIC CHIP	0.022MF	10%	50V
C3406	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3407	1-124-779-00	ELECT	10MF	20%	16V
C3411	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3415	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3500	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3501	1-104-913-11	TANTAL. CHIP	10MF	20%	16V
C3502	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3503	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3504	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3505	1-104-913-11	TANTAL. CHIP	10MF	20%	16V
C3700	1-104-913-11	TANTAL. CHIP	10MF	20%	16V
C3701	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3730	1-104-913-11	TANTAL. CHIP	10MF	20%	16V
C3731	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3732	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C3760	1-104-913-11	TANTAL. CHIP	10MF	20%	16V
C3761	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3762	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
		<CONNECTOR>			
CN3001	1-778-373-11	PIN, CONNECTOR (PC BOARD)			
		<DIODE>			
D3301	8-719-914-43	DIODE DAN202K			
D3700	8-719-914-44	DIODE DAP202K			
D3730	8-719-914-44	DIODE DAP202K			
D3760	8-719-914-44	DIODE DAP202K			
		<FERRITE BEAD>			
FB3100	1-414-234-11	INDUCTOR, FERRITE BEAD			
FB3101	1-414-234-11	INDUCTOR, FERRITE BEAD			
FB3130	1-414-234-11	INDUCTOR, FERRITE BEAD			
FB3131	1-414-234-11	INDUCTOR, FERRITE BEAD			
FB3160	1-414-234-11	INDUCTOR, FERRITE BEAD			
FB3161	1-414-234-11	INDUCTOR, FERRITE BEAD			
FB3381	1-412-364-11	INDUCTOR 0UH			
FB3402	1-414-234-11	INDUCTOR, FERRITE BEAD			
FB3403	1-414-234-11	INDUCTOR, FERRITE BEAD			
FB3500	1-414-234-11	INDUCTOR, FERRITE BEAD			
FB3501	1-414-234-11	INDUCTOR, FERRITE BEAD			

Q

REF. NO.	PART NO.	DESCRIPTION			REMARK
	* A-1275-139-A	Q BOARD, COMPLETE ****************			
		<CAPACITOR>			
C1001	1-126-204-11	ELECT	47MF	20%	16V
C1002	1-126-204-11	ELECT	47MF	20%	16V
C1003	1-126-204-11	ELECT	47MF	20%	16V
C1004	1-126-193-11	ELECT	1MF	20%	50V
C1005	1-126-193-11	ELECT	1MF	20%	50V
C1007	1-126-400-11	ELECT	22MF	20%	35V
C1008	1-126-204-11	ELECT	47MF	20%	16V
C1009	1-126-204-11	ELECT	47MF	20%	16V
C1010	1-126-204-11	ELECT	47MF	20%	16V
C1011	1-126-193-11	ELECT	1MF	20%	50V
C1012	1-126-193-11	ELECT	1MF	20%	50V
C1013	1-128-401-11	ELECT	100MF	20%	25V
C1014	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1015	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1016	1-126-197-11	ELECT	10MF	20%	50V
C1017	1-136-165-00	FILM	0.1MF	5%	50V
C1018	1-163-141-00	CERAMIC CHIP	0.001MF	5%	50V
C1019	1-126-193-11	ELECT	1MF	20%	50V
C1020	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1021	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C1022	1-126-197-11	ELECT	10MF	20%	50V
C1023	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1024	1-126-197-11	ELECT	10MF	20%	50V
C1025	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C1026	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C1027	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1028	1-126-197-11	ELECT	10MF	20%	50V
C1029	1-136-157-00	FILM	0.022MF	5%	50V
C1201	1-128-401-11	ELECT	100MF	20%	25V
C1202	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1203	1-128-451-11	ELECT CHIP	22MF	20%	16V
C1204	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V
C1205	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V
C1206	1-107-682-11	CERAMIC CHIP	1MF	10%	16V
C1207	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1208	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1209	1-107-682-11	CERAMIC CHIP	1MF	10%	16V
C1210	1-107-682-11	CERAMIC CHIP	1MF	10%	16V
C1211	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1212	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1213	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1214	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1215	1-107-682-11	CERAMIC CHIP	1MF	10%	16V
C1216	1-126-601-11	ELECT	2.2MF	20%	50V
C1217	1-128-401-11	ELECT	100MF	20%	25V
C1218	1-128-401-11	ELECT	100MF	20%	25V
C1219	1-128-401-11	ELECT	100MF	20%	25V
C1220	1-126-601-11	ELECT	2.2MF	20%	50V
C1223	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1224	1-126-941-11	ELECT	470MF	20%	25V
C1225	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1226	1-126-941-11	ELECT	470MF	20%	25V
C1227	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1228	1-128-401-11	ELECT	100MF	20%	25V
C1229	1-124-779-00	ELECT	10MF	20%	16V
C1231	1-107-682-11	CERAMIC CHIP	1MF	10%	16V
C1232	1-107-682-11	CERAMIC CHIP	1MF	10%	16V
C1235	1-126-601-11	ELECT	2.2MF	20%	50V
C1301	1-124-779-00	ELECT	10MF	20%	16V
C1303	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1305	1-126-393-11	ELECT	33MF	20%	10V
C1306	1-126-393-11	ELECT	33MF	20%	10V
C1307	1-126-393-11	ELECT	33MF	20%	10V
C1308	1-126-393-11	ELECT	33MF	20%	10V
C1309	1-126-393-11	ELECT	33MF	20%	10V
C1310	1-126-204-11	ELECT	47MF	20%	16V
C1311	1-126-393-11	ELECT	33MF	20%	10V
C1312	1-126-393-11	ELECT	33MF	20%	10V
C1314	1-126-393-11	ELECT	33MF	20%	10V
C1315	1-126-393-11	ELECT	33MF	20%	10V
C1401	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1402	1-128-401-11	ELECT	100MF	20%	25V
C2001	1-128-401-11	ELECT	100MF	20%	25V
C2002	1-128-401-11	ELECT	100MF	20%	25V
C2003	1-128-401-11	ELECT	100MF	20%	25V
C2101	1-126-204-11	ELECT	47MF	20%	16V
C2117	1-126-204-11	ELECT	47MF	20%	16V
C2118	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2121	1-126-204-11	ELECT	47MF	20%	16V
C2122	1-126-204-11	ELECT	47MF	20%	16V
C2123	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C2124	1-126-204-11	ELECT	47MF	20%	16V
C2125	1-124-779-00	ELECT	10MF	20%	16V
C2126	1-124-779-00	ELECT	10MF	20%	16V
C2127	1-124-779-00	ELECT	10MF	20%	16V
C2128	1-128-401-11	ELECT	100MF	20%	25V
C2129	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2301	1-124-779-00	ELECT	10MF	20%	16V
C2302	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2303	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C2304	1-126-204-11	ELECT	47MF	20%	16V
C2305	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2306	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2307	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2308	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2309	1-126-393-11	ELECT	33MF	20%	10V
C2310	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2311	1-126-204-11	ELECT	47MF	20%	16V
C2312	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C2313	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2314	1-126-603-11	ELECT	4.7MF	20%	35V
C2315	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C2316	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C2317	1-124-779-00	ELECT	10MF	20%	16V
C2318	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C2319	1-163-089-00	CERAMIC CHIP	6PF	0.5PF	50V
C2320	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C2322	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C2323	1-127-531-11	ELECT(SOLID)	33MF	20%	20V
C2324	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2325	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C2326	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2327	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2329	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2330	1-128-399-11	ELECT	330MF	20%	16V
C2331	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2332	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2333	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2334	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2335	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2336	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2337	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2338	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2501	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2502	1-126-204-11	ELECT	47MF	20%	16V
C2503	1-135-155-21	TANTAL. CHIP	4.7MF	20%	16V
C2504	1-126-204-11	ELECT	47MF	20%	16V
C2505	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2506	1-135-155-21	TANTAL. CHIP	4.7MF	20%	16V
C2507	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2508	1-104-563-11	FILM CHIP	0.1MF	5%	16V
C2509	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V

REF. NO.	PART NO.	DESCRIPTION			REMARK
C2510	1-126-204-11	ELECT	47MF	20%	16V
C2511	1-163-089-00	CERAMIC CHIP	6PF	0.5PF	50V
C2512	1-163-089-00	CERAMIC CHIP	6PF	0.5PF	50V
C2513	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2514	1-135-155-21	TANTAL. CHIP	4.7MF	20%	16V
C2515	1-163-229-11	CERAMIC CHIP	12PF	5%	50V
C2516	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2517	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2518	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2519	1-164-182-11	CERAMIC CHIP	0.0033MF	10%	50V
C2520	1-164-346-11	CERAMIC CHIP	1MF		16V
C2521	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2522	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2523	1-135-155-21	TANTAL. CHIP	4.7MF	20%	16V
C2524	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C2525	1-128-399-11	ELECT	330MF	20%	16V
C2526	1-163-224-11	CERAMIC CHIP	7PF	0.25PF	50V
C2527	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2528	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2529	1-164-182-11	CERAMIC CHIP	0.0033MF	10%	50V
C2530	1-126-191-11	ELECT	0.47MF	20%	50V
C2532	1-126-204-11	ELECT	47MF	20%	16V
C2533	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2535	1-126-204-11	ELECT	47MF	20%	16V
C2536	1-163-099-00	CERAMIC CHIP	18PF	5%	50V
C2538	1-124-779-00	ELECT	10MF	20%	16V
C2539	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2540	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2541	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2542	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2545	1-163-224-11	CERAMIC CHIP	7PF	0.25PF	50V

<CONNECTOR>

REF. NO.	PART NO.	DESCRIPTION	REMARK
CN1001	1-535-741-11	TERMINAL, S	
CN1201	*1-564-507-11	PLUG, CONNECTOR 4P	
CN1202	*1-564-507-11	PLUG, CONNECTOR 4P	
CN2003	1-778-373-11	PIN, CONNECTOR (PC BOARD)	
CN2004	1-778-373-11	PIN, CONNECTOR (PC BOARD)	

<DIODE>

REF. NO.	PART NO.	DESCRIPTION	REMARK
D1001	8-719-977-20	DIODE DTZ8.2B	
D1002	8-719-977-20	DIODE DTZ8.2B	
D1003	8-719-977-20	DIODE DTZ8.2B	
D1004	8-719-977-20	DIODE DTZ8.2B	
D1005	8-719-977-20	DIODE DTZ8.2B	
D1006	8-719-977-20	DIODE DTZ8.2B	
D1007	8-719-800-76	DIODE 1SS226	
D1008	8-719-977-20	DIODE DTZ8.2B	
D1009	8-719-977-20	DIODE DTZ8.2B	
D1010	8-719-977-20	DIODE DTZ8.2B	
D1013	8-719-977-20	DIODE DTZ8.2B	
D1014	8-719-977-20	DIODE DTZ8.2B	
D1201	8-719-914-43	DIODE DAN202K	
D1202	8-719-914-43	DIODE DAN202K	
D1203	8-719-159-85	DIODE RD2.0MB	
D2101	8-719-914-43	DIODE DAN202K	
D2301	8-719-914-43	DIODE DAN202K	
D2501	8-719-914-43	DIODE DAN202K	
D2502	8-719-914-44	DIODE DAP202K	
D2503	8-719-914-44	DIODE DAP202K	

<FILTER>

REF. NO.	PART NO.	DESCRIPTION	REMARK
FL2301	1-239-539-21	FILTER, LOW PASS	
FL2302	1-239-539-21	FILTER, LOW PASS	
FL2303	1-239-539-21	FILTER, LOW PASS	

<IC>

REF. NO.	PART NO.	DESCRIPTION	REMARK
IC1002	8-752-378-77	IC CXD2053S	
IC1201	8-759-273-12	IC TDA7315D013TR	
IC1202	8-759-980-43	IC TDA2009A	
	7-682-548-04	SCREW +P 3X8 ; IC1202	
IC1301	8-759-297-78	IC MM1231XFFK	
IC2101	8-752-068-45	IC CXA1855Q	
IC2102	8-759-710-29	IC NJM2235M	
IC2302	8-759-711-62	IC NJM2240M	
IC2303	8-752-372-78	IC CXD2024AQ	
IC2501	8-759-335-58	IC MM1112XFF	
IC2502	8-759-295-47	IC TDA9141-N2C	
IC2503	8-759-288-85	IC TDA4665T-T	
IC2504	8-759-335-58	IC MM1112XFF	

<JACK>

REF. NO.	PART NO.	DESCRIPTION	REMARK
J1001	1-778-402-11	CONNECTOR, BNC	
J1002	1-565-838-11	JACK BLOCK, PIN 2P	
J1003	1-778-929-11	CONNECTOR, BNC	
J1008	1-565-838-11	JACK BLOCK, PIN 2P	

<COIL>

REF. NO.	PART NO.	DESCRIPTION	REMARK
L1001	1-412-363-21	INDUCTOR 0UH	
L1002	1-412-363-21	INDUCTOR 0UH	
L1003	1-412-363-21	INDUCTOR 0UH	
L1004	1-412-363-21	INDUCTOR 0UH	
L1005	1-412-363-21	INDUCTOR 0UH	
L1007	1-412-363-21	INDUCTOR 0UH	
L1008	1-412-363-21	INDUCTOR 0UH	
L1009	1-412-363-21	INDUCTOR 0UH	
L1010	1-412-363-21	INDUCTOR 0UH	
L1011	1-412-363-21	INDUCTOR 0UH	
L1012	1-412-363-21	INDUCTOR 0UH	
L1013	1-414-235-11	INDUCTOR, FERRITE BEAD	
L1014	1-414-235-11	INDUCTOR, FERRITE BEAD	
L2304	1-412-002-31	INDUCTOR CHIP 4.7UH	
L2306	1-414-235-11	INDUCTOR, FERRITE BEAD	
L2501	1-216-295-91	CONDUCTOR, CHIP	
L2502	1-216-295-91	CONDUCTOR, CHIP	
L2503	1-216-295-91	CONDUCTOR, CHIP	
L2504	1-216-295-91	CONDUCTOR, CHIP	
L2506	1-216-295-91	CONDUCTOR, CHIP	

<TRANSISTOR>

REF. NO.	PART NO.	DESCRIPTION	REMARK
Q1002	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1003	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1004	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1005	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1006	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q1201	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1202	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1203	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1204	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1205	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1301	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1302	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1303	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1304	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1305	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1306	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1307	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1308	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q1309	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q2101	8-729-216-22	TRANSISTOR 2SA1162-G	
Q2102	8-729-216-22	TRANSISTOR 2SA1162-G	
Q2103	8-729-216-22	TRANSISTOR 2SA1162-G	

Q

REF. NO.	PART NO.	DESCRIPTION			REMARK	
Q2104	8-729-216-22	TRANSISTOR 2SA1162-G				
Q2105	8-729-216-22	TRANSISTOR 2SA1162-G				
Q2106	8-729-230-49	TRANSISTOR 2SC2712-YG				
Q2301	8-729-230-49	TRANSISTOR 2SC2712-YG				
Q2302	8-729-230-49	TRANSISTOR 2SC2712-YG				
Q2303	8-729-230-49	TRANSISTOR 2SC2712-YG				
Q2304	8-729-230-49	TRANSISTOR 2SC2712-YG				
Q2305	8-729-027-59	TRANSISTOR DTC144EKA-T146				
Q2306	8-729-230-49	TRANSISTOR 2SC2712-YG				
Q2307	8-729-230-49	TRANSISTOR 2SC2712-YG				
Q2308	8-729-216-22	TRANSISTOR 2SA1162-G				
Q2309	8-729-027-38	TRANSISTOR DTA144EKA-T146				
Q2310	8-729-216-22	TRANSISTOR 2SA1162-G				
Q2311	8-729-230-49	TRANSISTOR 2SC2712-YG				
Q2312	8-729-230-49	TRANSISTOR 2SC2712-YG				
Q2313	8-729-230-49	TRANSISTOR 2SC2712-YG				
Q2314	8-729-230-49	TRANSISTOR 2SC2712-YG				
Q2315	8-729-230-49	TRANSISTOR 2SC2712-YG				
Q2316	8-729-027-59	TRANSISTOR DTC144EKA-T146				
Q2317	8-729-216-22	TRANSISTOR 2SA1162-G				
Q2501	8-729-027-59	TRANSISTOR DTC144EKA-T146				
Q2502	8-729-027-59	TRANSISTOR DTC144EKA-T146				
Q2503	8-729-230-49	TRANSISTOR 2SC2712-YG				
Q2504	8-729-230-49	TRANSISTOR 2SC2712-YG				
Q2505	8-729-027-59	TRANSISTOR DTC144EKA-T146				
Q2506	8-729-230-49	TRANSISTOR 2SC2712-YG				
Q2507	8-729-230-49	TRANSISTOR 2SC2712-YG				
Q2508	8-729-230-49	TRANSISTOR 2SC2712-YG				
Q2510	8-729-230-49	TRANSISTOR 2SC2712-YG				
Q2512	8-729-230-49	TRANSISTOR 2SC2712-YG				
Q2513	8-729-230-49	TRANSISTOR 2SC2712-YG				
Q2514	8-729-230-49	TRANSISTOR 2SC2712-YG				
Q2515	8-729-230-49	TRANSISTOR 2SC2712-YG				
		<RESISTOR>				
R1001	1-216-022-00	METAL GLAZE	75	5%	1/10W	
R1003	1-216-022-00	METAL GLAZE	75	5%	1/10W	
R1004	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R1005	1-216-022-00	METAL GLAZE	75	5%	1/10W	
R1006	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R1007	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R1008	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R1009	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R1010	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R1013	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R1017	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R1018	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R1019	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R1020	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R1021	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R1022	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R1023	1-216-017-91	METAL GLAZE	47	5%	1/10W	
R1024	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R1025	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R1026	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R1027	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R1028	1-216-017-91	METAL GLAZE	47	5%	1/10W	
R1029	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R1030	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R1031	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R1032	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R1033	1-216-017-91	METAL GLAZE	47	5%	1/10W	
R1034	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R1035	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R1036	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R1037	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R1038	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R1039	1-216-295-91	CONDUCTOR, CHIP				
R1040	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R1041	1-216-075-00	METAL GLAZE	12K	5%	1/10W	
R1042	1-216-022-00	METAL GLAZE	75	5%	1/10W	
R1043	1-216-022-00	METAL GLAZE	75	5%	1/10W	
R1044	1-216-022-00	METAL GLAZE	75	5%	1/10W	
R1045	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R1046	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R1047	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R1048	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R1049	1-216-085-00	METAL GLAZE	33K	5%	1/10W	
R1050	1-216-005-00	METAL GLAZE	15	5%	1/10W	
R1051	1-216-013-00	METAL GLAZE	33	5%	1/10W	
R1052	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R1053	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R1201	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R1202	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R1203	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R1204	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R1205	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W	
R1206	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W	
R1207	1-216-051-00	METAL GLAZE	1.2K	5%	1/10W	
R1208	1-216-013-00	METAL GLAZE	33	5%	1/10W	
R1209	1-216-013-00	METAL GLAZE	33	5%	1/10W	
R1210	1-216-051-00	METAL GLAZE	1.2K	5%	1/10W	
R1211	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R1212	1-216-295-91	CONDUCTOR, CHIP				
R1214	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R1215	1-216-295-91	CONDUCTOR, CHIP				
R1217	1-249-385-11	CARBON	2.2	5%	1/4W	F
R1218	1-249-385-11	CARBON	2.2	5%	1/4W	F
R1219	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R1220	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R1221	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1222	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1223	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R1224	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R1225	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R1234	1-216-075-00	METAL GLAZE	12K	5%	1/10W	
R1235	1-216-075-00	METAL GLAZE	12K	5%	1/10W	
R1236	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1237	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R1238	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R1239	1-216-097-91	METAL GLAZE	100K	5%	1/10W	
R1301	1-216-017-91	METAL GLAZE	47	5%	1/10W	
R1302	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R1303	1-216-655-11	METAL CHIP	1.5K	0.50%	1/10W	
R1304	1-216-017-91	METAL GLAZE	47	5%	1/10W	
R1305	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R1306	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R1307	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R1308	1-208-775-11	METAL CHIP	510	0.50%	1/10W	
R1310	1-216-017-91	METAL GLAZE	47	5%	1/10W	
R1311	1-216-655-11	METAL CHIP	1.5K	0.50%	1/10W	
R1312	1-216-017-91	METAL GLAZE	47	5%	1/10W	
R1313	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R1314	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R1315	1-208-775-11	METAL CHIP	510	0.50%	1/10W	
R1317	1-216-017-91	METAL GLAZE	47	5%	1/10W	
R1318	1-216-655-11	METAL CHIP	1.5K	0.50%	1/10W	
R1319	1-216-017-91	METAL GLAZE	47	5%	1/10W	
R1320	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R1321	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R1322	1-208-775-11	METAL CHIP	510	0.50%	1/10W	
R1324	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R1325	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R1326	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R1327	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R1328	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R1329	1-216-049-91	METAL GLAZE	1K	5%	1/10W	

REF. NO.	PART NO.	DESCRIPTION			REMARK
R1330	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R1331	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R1332	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R1333	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R1334	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R1335	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R2101	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2102	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2105	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2106	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W
R2107	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W
R2108	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2109	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2110	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2111	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2112	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W
R2113	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R2114	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2115	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W
R2116	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2117	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2118	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R2119	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R2120	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R2121	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R2122	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2123	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2124	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2125	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2126	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2127	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2128	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R2129	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2130	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2131	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2132	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2133	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R2134	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2135	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R2136	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R2137	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R2138	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R2139	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R2140	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2141	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R2142	1-216-641-11	METAL CHIP	390	0.50%	1/10W
R2143	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2301	1-216-017-91	METAL GLAZE	47	5%	1/10W
R2302	1-216-017-91	METAL GLAZE	47	5%	1/10W
R2308	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R2309	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2310	1-216-085-00	METAL GLAZE	33K	5%	1/10W
R2311	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2312	1-216-051-00	METAL GLAZE	1.2K	5%	1/10W
R2313	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R2314	1-216-045-00	METAL GLAZE	680	5%	1/10W
R2319	1-216-037-00	METAL GLAZE	330	5%	1/10W
R2321	1-216-045-00	METAL GLAZE	680	5%	1/10W
R2322	1-216-045-00	METAL GLAZE	680	5%	1/10W
R2326	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R2328	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R2329	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R2330	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R2331	1-216-037-00	METAL GLAZE	330	5%	1/10W
R2333	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W
R2335	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W
R2336	1-216-033-00	METAL GLAZE	220	5%	1/10W
R2337	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2338	1-216-049-91	METAL GLAZE	1K	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION			REMARK
R2339	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R2340	1-208-771-11	METAL CHIP	360	0.50%	1/10W
R2341	1-216-041-00	METAL GLAZE	470	5%	1/10W
R2343	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R2344	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2345	1-216-085-00	METAL GLAZE	33K	5%	1/10W
R2346	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2347	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R2348	1-216-041-00	METAL GLAZE	470	5%	1/10W
R2349	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2350	1-216-045-00	METAL GLAZE	680	5%	1/10W
R2351	1-216-041-00	METAL GLAZE	470	5%	1/10W
R2352	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2353	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2354	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2355	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R2359	1-216-635-11	METAL CHIP	220	0.50%	1/10W
R2361	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R2362	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R2363	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2364	1-216-635-11	METAL CHIP	220	0.50%	1/10W
R2365	1-216-037-00	METAL GLAZE	330	5%	1/10W
R2366	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W
R2367	1-216-657-11	METAL CHIP	1.8K	0.50%	1/10W
R2368	1-216-657-11	METAL CHIP	1.8K	0.50%	1/10W
R2369	1-216-661-11	METAL CHIP	2.7K	0.50%	1/10W
R2370	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R2501	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R2502	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2503	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2504	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2505	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R2506	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2507	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2508	1-216-047-91	METAL CHIP	820	0.50%	1/10W
R2509	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R2510	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2511	1-216-095-00	METAL GLAZE	82K	5%	1/10W
R2512	1-216-047-91	METAL CHIP	820	0.50%	1/10W
R2513	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R2514	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R2515	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R2516	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R2517	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2518	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2519	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2520	1-216-033-00	METAL GLAZE	220	5%	1/10W
R2521	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R2522	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2523	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R2524	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2525	1-216-652-11	METAL CHIP	1.1K	0.50%	1/10W
R2526	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2527	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2528	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2529	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2530	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R2531	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2532	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2533	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2534	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R2535	1-216-063-91	METAL GLAZE	3.9K	5%	1/10W
R2536	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R2539	1-216-652-11	METAL CHIP	1.1K	0.50%	1/10W
R2540	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R2541	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W
R2542	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R2543	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R2544	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W

Q GA

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite.
Ne les remplacer que par une piece portant le numero specifie.

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION			REMARK
R2545	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R2546	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R2547	1-216-017-91	METAL GLAZE	47	5%	1/10W
R2548	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R2549	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R2550	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R2554	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2555	1-216-025-91	METAL GLAZE	100	5%	1/10W

<CRYSTAL>

REF. NO.	PART NO.	DESCRIPTION
X1002	1-527-722-00	VIBRATOR, CRYSTAL
X2501	1-579-973-11	VIBRATOR, CRYSTAL
X2502	1-567-505-11	OSCILLATOR, CRYSTAL
X2503	1-567-504-11	OSCILLATOR, CRYSTAL

****

⚠*A-1316-276-A GA BOARD, COMPLETE (VPL-W400Q)
****
(Including GAA, GAB, GAC BOARD)

⚠*A-1316-297-A GA BOARD, COMPLETE (VPL-W400QM)
****
(Including GAA, GAB, GAC BOARD)

<CAPACITOR>

REF. NO.	PART NO.	DESCRIPTION				REMARK
C8001	⚠1-113-511-11	FILM	0.47MF	20%	275V	
C8002	⚠1-136-727-11	FILM	0.068MF	5%	1.25KV	(VPL-W400Q)
C8002	⚠1-136-726-11	FILM	0.056MF	5%	1.25KV	(VPL-W400QM)
C8003	⚠1-136-727-11	FILM	0.068MF	5%	1.25KV	(VPL-W400Q)
C8003	⚠1-136-726-11	FILM	0.056MF	5%	1.25KV	(VPL-W400QM)
C8004	⚠1-117-185-11	ELECT	1500MF	20%	250V	
C8005	⚠1-117-185-11	ELECT	1500MF	20%	250V	
C8006	⚠1-107-888-91	ELECT	47MF	20%	25V	
C8007	⚠1-125-601-11	ELECT	470MF	20%	450V	
C8008	⚠1-136-727-11	FILM	0.068MF	5%	1.25KV	
C8010	⚠1-117-186-11	FILM	2.2MF	10%	200V	
C8011	⚠1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V	
C8012	⚠1-137-477-61	FILM0.47MF	10%	400V		
C8013	⚠1-137-477-61	FILM	0.47MF	10%	400V	
C8014	⚠1-107-888-91	ELECT	47MF	20%	25V	
C8015	⚠1-164-004-91	CERAMIC CHIP	0.1MF	10%	25V	
C8016	⚠1-164-004-91	CERAMIC CHIP	0.1MF	10%	25V	
C8017	⚠1-164-644-91	CERAMIC	330PF	10%	500V	
C8018	⚠1-164-644-91	CERAMIC	330PF	10%	500V	
C8019	⚠1-163-251-91	CERAMIC CHIP	100PF	5%	50V	
C8020	⚠1-107-889-91	ELECT	220MF	20%	25V	
C8021	⚠1-164-004-91	CERAMIC CHIP	0.1MF	10%	25V	
C8025	⚠1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V	
C8050	⚠1-107-888-91	ELECT	47MF	20%	25V	
C8070	⚠1-164-004-91	CERAMIC CHIP	0.1MF	10%	25V	

<CONNECTOR>

REF. NO.	PART NO.	DESCRIPTION
CN8001⚠*	1-774-248-11	CONNECTOR, BOARD TO BOARD 8P
CN8002⚠*	1-580-689-11	PIN, CONNECTOR (PC BOARD) 4P
CN8003⚠	1-691-960-11	PIN, CONNECTOR (PC BOARD) 3P
CN8004⚠*	1-774-249-11	CONNECTOR, BOARD TO BOARD 10P
CN8005⚠*	1-774-247-11	CONNECTOR, BOARD TO BOARD 5P
CN8006⚠*	1-774-248-11	CONNECTOR, BOARD TO BOARD 8P
CN8007⚠*	1-564-506-51	PLUG, CONNECTOR 3P
CN8008⚠*	1-564-507-31	PLUG, CONNECTOR 4P

<DIODE>

REF. NO.	PART NO.	DESCRIPTION
D8001	⚠8-719-124-09	DIODE 1S2836-T1
D8002	⚠8-719-058-53	DIODE D8L60
	7-682-548-04	SCREW +P 3X8 ; D8002
D8003	⚠8-719-022-99	DIODE D6SB60L
	7-682-548-04	SCREW +P 3X8 ; D8003
D8004	⚠8-719-058-53	DIODE D8L60
	7-682-548-04	SCREW +P 3X8 ; D8004
D8005	⚠8-719-124-09	DIODE 1S2836-T1
D8006	⚠8-719-058-54	DIODE D20LC40F
	7-682-548-04	SCREW +P 3X8 ; D8006
D8007	⚠8-719-058-54	DIODE D20LC40F
	7-682-548-04	SCREW +P 3X8 ; D8007
D8008	⚠8-719-058-43	DIODE RD120E-T1
D8009	⚠8-719-058-54	DIODE D20LC40F
D8010	⚠8-719-921-20	DIODE 1SS119-25TD
D8025	⚠8-719-161-03	DIODE RD10SB-T1
D8101	⚠8-719-161-03	DIODE RD12SB2-T1

<HIGH-VOLTAGE BLOCK>

REF. NO.	PART NO.	DESCRIPTION
IG8001	⚠1-453-213-11	HIGH-VOLTAGE BLOCK

<COIL>

REF. NO.	PART NO.	DESCRIPTION
L8001	⚠1-411-914-11	COIL, CHOKE 220UH

<PHOTO COUPLER>

REF. NO.	PART NO.	DESCRIPTION
PH8001	⚠8-749-013-16	IC PC357N2T
PH8002	⚠8-749-013-16	IC PC357N2T
PH8004	⚠8-749-013-16	IC PC357N2T
PH8005	⚠8-749-010-65	PHOTO COUPLER PC123FY2
PH8006	⚠8-749-010-65	PHOTO COUPLER PC123FY2

<TRANSISTOR>

REF. NO.	PART NO.	DESCRIPTION
Q8001	⚠8-729-230-47	TRANSISTOR 2SA1162-YG-TE85L
Q8002	⚠8-729-927-08	TRANSISTOR IRFI-840
Q8003	⚠8-729-037-46	TRANSISTOR 2SK1328-01
	7-682-548-04	SCREW +P 3X8 ; Q8003
Q8004	⚠8-729-037-46	TRANSISTOR 2SK1328-01
	7-682-548-04	SCREW +P 3X8 ; Q8004
Q8005	⚠8-729-230-50	TRANSISTOR 2SC2712-YG-TE85L
Q8006	⚠8-719-059-26	DIODE K1V16TA
Q8010	⚠8-729-230-50	TRANSISTOR 2SC2712-YG-TE85L
Q8018	⚠8-729-230-50	TRANSISTOR 2SC2712-YG-TE85L
Q8030	⚠8-729-230-47	TRANSISTOR 2SA1162-YG-TE85L
Q8031	⚠8-729-230-50	TRANSISTOR 2SC2712-YG-TE85L
Q8101	⚠8-729-230-47	TRANSISTOR 2SA1162-YG-TE85L
Q8102	⚠8-729-230-50	TRANSISTOR 2SC2712-YG-TE85L

<RESISTOR>

REF. NO.	PART NO.	DESCRIPTION				REMARK
R8001	⚠1-220-779-11	WIREWOUND	5.6	5%	7W	
R8002	⚠1-202-933-61	FUSIBLE	0.1	10%	1/2W	F
R8003	⚠1-220-338-91	METAL GLAZE	330K	5%	1/2W	
R8004	⚠1-220-338-91	METAL GLAZE	330K	5%	1/2W	
R8006	⚠1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R8007	⚠1-216-065-91	METAL GLAZE	4.7K	5%	1/10W	
R8008	⚠1-216-073-91	METAL GLAZE	10K	5%	1/10W	
R8011	⚠1-202-933-61	FUSIBLE	0.1	10%	1/2W	F
R8012	⚠1-220-289-91	METAL GLAZE	22K	5%	1/4W	
R8013	⚠1-220-289-91	METAL GLAZE	22K	5%	1/4W	
R8014	⚠1-216-065-91	METAL GLAZE	4.7K	5%	1/10W	
R8015	⚠1-216-065-91	METAL GLAZE	4.7K	5%	1/10W	
R8016	⚠1-215-863-71	METAL OXIDE	100	5%	1W	F
R8017	⚠1-215-863-71	METAL OXIDE	100	5%	1W	F
R8020	⚠1-216-061-91	METAL GLAZE	3.3K	5%	1/10W	

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Ne les remplacer que par une piece portant le numero specifie.

REF. NO.	PART NO.	DESCRIPTION			REMARK	
R8022	⚠1-220-752-51	WIREWOUND	0.1	1%	3W	
R8023	⚠1-217-796-11	FUSIBLE	33	5%	5W	F
R8025	⚠1-260-336-71	CARBON	4.7K	5%	1/2W	
R8026	⚠1-260-336-71	CARBON	4.7K	5%	1/2W	
R8027	⚠1-216-073-91	METAL GLAZE	10K	5%	1/10W	
R8028	⚠1-216-041-91	METAL GLAZE	470	5%	1/10W	
R8029	⚠1-220-752-51	WIREWOUND	0.1	1%	3W	
R8031	⚠1-217-796-11	FUSIBLE	33	5%	5W	F
R8037	⚠1-218-191-71	METAL OXIDE	0.1	5%	1W	F
R8038	⚠1-218-191-71	METAL OXIDE	0.1	5%	1W	F
R8050	⚠1-216-073-91	METAL GLAZE	10K	5%	1/10W	
R8051	⚠1-216-057-91	METAL GLAZE	2.2K	5%	1/10W	
R8052	⚠1-216-295-91	CONDUCTOR, CHIP				
R8056	⚠1-216-061-91	METAL GLAZE	3.3K	5%	1/10W	
R8057	⚠1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R8060	⚠1-216-073-91	METAL GLAZE	10K	5%	1/10W	
R8061	⚠1-216-065-91	METAL GLAZE	4.7K	5%	1/10W	
R8070	⚠1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R8071	⚠1-216-065-91	METAL GLAZE	4.7K	5%	1/10W	
R8072	⚠1-216-053-91	METAL GLAZE	1.5K	5%	1/10W	
R8073	⚠1-216-065-91	METAL GLAZE	4.7K	5%	1/10W	
R8074	⚠1-216-349-71	METAL OXIDE	1	5%	1W	F
R8080	⚠1-220-779-11	WIREWOUND	5.6	5%	7W	
R8102	⚠1-216-065-91	METAL GLAZE	4.7K	5%	1/10W	
R8103	⚠1-216-065-91	METAL GLAZE	4.7K	5%	1/10W	
R8104	⚠1-216-073-91	METAL GLAZE	10K	5%	1/10W	
R8105	⚠1-216-073-91	METAL GLAZE	10K	5%	1/10W	
R8106	⚠1-216-065-91	METAL GLAZE	4.7K	5%	1/10W	

<RELAY>

RY8001	⚠1-515-849-11	RELAY
RY8002	⚠1-515-849-11	RELAY

<TRANSFORMER>

T8001	⚠1-429-770-11	TRANSFORMER, CONVERTER (PIT)

GAA BOARD
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<CAPACITOR>

C8201	1-107-968-91	ELECT	2.2MF	20%	400V
C8202	1-126-155-51	ELECT	100MF	20%	6.3V
C8203	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C8204	1-136-165-00	FILM	0.1MF	5%	50V
C8205	1-136-165-00	FILM	0.1MF	5%	50V
C8206	1-124-589-11	ELECT	47MF	20%	16V
C8207	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C8210	1-128-077-11	ELECT	22MF	20%	25V

<CONNECTOR>

CN8201	*1-774-245-11	CONNECTOR, BOARD TO BOARD 8P

<DIODE>

D8201	8-719-054-32	DIODE ERA15-06
D8202	8-719-800-76	DIODE 1SS226

<IC>

IC8201	8-759-100-93	IC uPC393G2
IC8202	8-759-245-47	IC TA78L09F-T1
IC8203	8-759-100-94	IC uPC358G2

REF. NO.	PART NO.	DESCRIPTION	REMARK

<TRANSISTOR>

Q8201	8-729-230-49	TRANSISTOR 2SC2712-YG
Q8202	8-729-216-22	TRANSISTOR 2SA1162-G
Q8203	8-729-230-49	TRANSISTOR 2SC2712-YG
Q8204	8-729-216-22	TRANSISTOR 2SA1162-G
Q8210	8-729-230-49	TRANSISTOR 2SC2712-YG

<RESISTOR>

R8201	1-215-485-00	METAL	470K	1%	1/4W
R8202	1-215-485-00	METAL	470K	1%	1/4W
R8203	1-208-814-11	METAL CHIP	22K	0.50%	1/10W
R8204	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R8205	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R8207	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R8208	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R8209	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R8210	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R8211	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R8212	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R8213	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R8214	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R8215	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R8216	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R8217	1-216-665-11	METAL CHIP	3.9K	0.50%	1/10W
R8218	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R8220	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R8221	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R8222	1-218-768-11	METAL CHIP	470K	0.50%	1/10W
R8223	1-218-768-11	METAL CHIP	470K	0.50%	1/10W
R8224	1-208-822-11	METAL CHIP	47K	0.50%	1/10W
R8225	1-208-806-11	METAL CHIP	10K	0.50%	1/10W
R8226	1-216-673-11	METAL CHIP	8.2K	0.50%	1/10W
R8227	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R8228	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R8229	1-216-029-00	METAL GLAZE	150	5%	1/10W
R8230	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R8231	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W

GAB BOARD
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<CAPACITOR>

C8301	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C8302	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C8303	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C8304	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C8306	1-128-526-11	ELECT	100MF	20%	16V
C8307	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C8308	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C8309	1-126-157-11	ELECT	10MF	20%	16V
C8310	1-124-589-11	ELECT	47MF	20%	16V
C8312	1-126-096-11	ELECT	10MF	20%	35V
C8320	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C8321	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C8323	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C8326	1-104-664-11	ELECT	47MF	20%	25V
C8331	1-136-165-00	FILM	0.1MF	5%	50V

<CONNECTOR>

CN8301	*1-774-245-11	CONNECTOR, BOARD TO BOARD 8P
CN8302	*1-774-244-11	CONNECTOR, BOARD TO BOARD 5P

<DIODE>

D8301	8-719-104-34	DIODE 1S2836

GAB GAC

REF. NO.	PART NO.	DESCRIPTION			REMARK
D8302	8-719-104-34	DIODE 1S2836			
D8303	8-719-104-34	DIODE 1S2836			
D8305	8-719-118-15	DIODE RD36M-B			
D8307	8-719-104-34	DIODE 1S2836			
D8308	8-719-104-34	DIODE 1S2836			
D8309	8-719-158-15	DIODE RD5.6SB			
D8310	8-719-158-17	DIODE RD5.6SB2			
D8320	8-719-801-78	DIODE 1SS184			
D8321	8-719-161-05	DIODE RD8.2SB-T1			
D8322	8-719-104-34	DIODE 1S2836			
D8323	8-719-104-34	DIODE 1S2836			
D8324	8-719-801-78	DIODE 1SS184			
D8330	8-719-104-34	DIODE 1S2836			

<IC>

IC8301	8-759-100-95	IC uPC324G2
IC8303	8-759-388-23	IC TL431BCDR2
IC8304	8-759-169-45	IC TA78L12F
IC8305	8-759-701-01	IC NJM2904M

<TRANSISTOR>

Q8303	8-729-216-22	TRANSISTOR 2SA1162-G
Q8304	8-729-230-49	TRANSISTOR 2SC2712-YG
Q8306	8-729-216-22	TRANSISTOR 2SA1162-G
Q8308	8-729-216-22	TRANSISTOR 2SA1162-G
Q8309	8-729-216-22	TRANSISTOR 2SA1162-G
Q8310	8-729-230-49	TRANSISTOR 2SC2712-YG
Q8311	8-729-230-49	TRANSISTOR 2SC2712-YG
Q8312	8-729-230-49	TRANSISTOR 2SC2712-YG
Q8313	8-729-230-49	TRANSISTOR 2SC2712-YG
Q8314	8-729-216-22	TRANSISTOR 2SA1162-G
Q8320	8-729-216-22	TRANSISTOR 2SA1162-G
Q8321	8-729-230-49	TRANSISTOR 2SC2712-YG

<RESISTOR>

R8302	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R8303	1-218-760-11	METAL CHIP	220K	0.50%	1/10W
R8304	1-216-674-11	METAL CHIP	9.1K	0.50%	1/10W
R8307	1-216-698-11	METAL CHIP	91K	0.50%	1/10W
R8308	1-208-806-11	METAL CHIP	10K	0.50%	1/10W
R8309	1-218-772-11	METAL CHIP	680K	0.50%	1/10W
R8310	1-218-768-11	METAL CHIP	470K	0.50%	1/10W
R8313	1-220-154-11	METAL CHIP	100K	0.10%	1/10W
R8314	1-220-750-11	METAL	910	0.10%	1/10W
R8315	1-218-367-11	METAL CHIP	10K	0.10%	1/10W
R8316	1-219-712-11	METAL CHIP	390	0.10%	1/10W
R8317	1-208-806-11	METAL CHIP	10K	0.50%	1/10W
R8318	1-208-785-11	METAL CHIP	1.3K	0.50%	1/10W
R8321	1-247-815-91	CARBON	220	5%	1/4W
R8322	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R8323	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R8324	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W
R8325	1-216-091-00	METAL GLAZE	56K	5%	1/10W
R8327	1-247-815-91	CARBON	220	5%	1/4W
R8328	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R8331	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R8332	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R8333	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R8334	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R8336	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R8337	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R8338	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R8342	1-218-758-11	METAL CHIP	180K	0.50%	1/10W
R8344	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R8349	1-216-635-11	METAL CHIP	220	0.50%	1/10W
R8350	1-220-751-11	METAL	2.2K	0.10%	1/10W

REF. NO.	PART NO.	DESCRIPTION			REMARK
R8351	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R8352	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R8354	1-216-295-91	CONDUCTOR, CHIP			
R8355	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R8356	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R8357	1-216-041-00	METAL GLAZE	470	5%	1/10W
R8358	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R8359	1-216-025-91	METAL GLAZE	100	5%	1/10W
R8360	1-216-079-00	METAL GLAZE	18K	5%	1/10W
R8361	1-216-295-91	CONDUCTOR, CHIP			
R8362	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R8363	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R8364	1-216-105-91	METAL GLAZE	220K	5%	1/10W
R8365	1-216-041-00	METAL GLAZE	470	5%	1/10W
R8367	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R8368	1-208-806-11	METAL CHIP	10K	0.50%	1/10W
R8369	1-208-806-11	METAL CHIP	10K	0.50%	1/10W
R8370	1-208-806-11	METAL CHIP	10K	0.50%	1/10W
R8371	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R8372	1-208-806-11	METAL CHIP	10K	0.50%	1/10W
R8380	1-216-295-91	CONDUCTOR, CHIP			
R8381	1-220-154-11	METAL CHIP	100K	0.10%	1/10W
R8382	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R8383	1-216-047-91	METAL GLAZE	820	5%	1/10W
R8384	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R8385	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R8386	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R8387	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R8388	1-216-295-91	CONDUCTOR, CHIP			

GAC BOARD

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<CAPACITOR>

C8401	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C8402	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V
C8403	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V
C8404	1-163-141-00	CERAMIC CHIP	0.001MF	5%	50V
C8405	1-163-141-00	CERAMIC CHIP	0.001MF	5%	50V
C8406	1-164-346-11	CERAMIC CHIP	1MF		16V
C8407	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C8408	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C8410	1-163-121-00	CERAMIC CHIP	150PF	5%	50V
C8411	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C8412	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C8413	1-164-222-11	CERAMIC CHIP	0.22MF		25V
C8414	1-126-096-11	ELECT	10MF	20%	35V
C8420	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V

<CONNECTOR>

CN8401	*1-774-246-11	CONNECTOR, BOARD TO BOARD 10P

<DIODE>

D8401	8-719-911-19	DIODE 1SS119-25
D8402	8-719-911-19	DIODE 1SS119-25
D8403	8-719-986-73	DIODE RB441Q
D8404	8-719-986-73	DIODE RB441Q

<IC>

IC8401	8-759-298-87	IC CXA8038P

<TRANSISTOR>

Q8401	8-729-104-75	TRANSISTOR 2SB799-ML

The componants identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite.
Ne les remplacer que par une piece portant le numero specifie.

REF. NO.	PART NO.	DESCRIPTION				REMARK
Q8402	8-729-104-75	TRANSISTOR 2SB799-ML				
		<RESISTOR>				
R8401	1-216-017-91	METAL GLAZE	47	5%	1/10W	
R8404	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R8405	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R8406	1-249-393-11	CARBON	10	5%	1/4W	F
R8407	1-249-393-11	CARBON	10	5%	1/4W	F
R8408	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R8409	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R8410	1-216-109-00	METAL GLAZE	330K	5%	1/10W	
R8412	1-216-689-11	METAL CHIP	39K	0.50%	1/10W	
R8413	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R8414	1-208-806-11	METAL CHIP	10K	0.50%	1/10W	
R8420	1-208-822-11	METAL CHIP	47K	0.50%	1/10W	
R8421	1-216-295-91	CONDUCTOR, CHIP				
R8424	1-216-009-00	METAL GLAZE	22	5%	1/10W	
R8425	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R8430	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W	
		<TRANSFORMER>				
T8401	1-429-741-11	TRANSFORMER, DRIVE				
		<THERMISTOR>				
TH8401	1-807-796-11	THERMISTOR				

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⚠* A-1316-280-A GB BOARD, COMPLETE
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(Including GBA BOARD)

REF. NO.	PART NO.	DESCRIPTION				REMARK
	7-682-548-04	SCREW +P 3X8				
		<CAPACITOR>				
C7001	⚠1-164-644-91	CERAMIC	330PF	10%	500V	
C7002	⚠1-164-644-91	CERAMIC	330PF	10%	500V	
C7003	⚠1-107-905-91	ELECT	4.7MF	20%	50V	
C7004	⚠1-128-526-91	ELECT	100MF	20%	25V	
C7005	⚠1-137-192-81	FILM	0.33MF	5%	50V	
C7006	⚠1-137-192-81	FILM	0.33MF	5%	50V	
C7007	⚠1-164-625-91	CERAMIC	680PF	10%	500V	
C7008	⚠1-137-188-81	FILM	0.15MF	5%	50V	
C7009	⚠1-136-167-00	FILM	0.15MF	5%	50V	
C7010	⚠1-129-718-91	FILM	0.022MF	10%	630V	
C7011	⚠1-107-868-91	ELECT	330MF	20%	6.3V	
C7012	⚠1-163-809-91	CERAMIC CHIP	0.047MF	10%	25V	
C7013	⚠1-107-890-91	ELECT	2200MF	20%	25V	
C7014	⚠1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V	
C7015	⚠1-107-891-91	ELECT	3300MF	20%	25V	
C7016	⚠1-128-526-91	ELECT	100MF	20%	25V	
C7017	⚠1-107-878-91	ELECT	2200MF	20%	10V	
C7018	⚠1-107-905-91	ELECT	4.7MF	20%	50V	
C7019	⚠1-128-526-91	ELECT	100MF	20%	25V	
C7021	⚠1-128-526-91	ELECT	100MF	20%	25V	
C7023	⚠1-109-982-91	CERAMIC CHIP	1MF	10%	10V	
C7030	⚠1-164-004-91	CERAMIC CHIP	0.1MF	10%	25V	
C7060	⚠1-107-888-91	ELECT	47MF	20%	25V	
C7061	⚠1-107-888-91	ELECT	47MF	20%	25V	
C7062	⚠1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V	
		<CONNECTOR>				
CN7001	⚠* 1-774-247-11	CONNECTOR, BOARD TO BOARD 5P				
CN7002	⚠* 1-564-507-31	PLUG, CONNECTOR 4P				
CN7003	⚠* 1-774-248-11	CONNECTOR, BOARD TO BOARD 8P				

REF. NO.	PART NO.	DESCRIPTION				REMARK
CN7004	⚠ 1-691-960-11	PIN, CONNECTOR (PC BOARD) 3P				
CN7005	⚠ 1-564-511-11	PLUG, CONNECTOR 8P				
CN7007	⚠* 1-564-507-11	PLUG, CONNECTOR 4P				
CN7008	⚠* 1-564-513-11	PLUG, CONNECTOR 10P				
CN7009	⚠* 1-564-506-61	PLUG, CONNECTOR 3P				
CN7010	⚠* 1-564-506-51	PLUG, CONNECTOR 3P				
		<DIODE>				
D7001	⚠8-719-921-20	DIODE 1SS119-25TD				
D7002	⚠8-719-921-20	DIODE 1SS119-25TD				
D7003	⚠8-719-921-20	DIODE 1SS119-25TD				
D7004	⚠8-719-921-20	DIODE 1SS119-25TD				
D7005	⚠8-719-024-88	DIODE D1NL20-TR				
D7006	⚠8-719-052-91	DIODE D4SBS4-F				
D7007	⚠8-719-510-12	DIODE D10SC4M				
D7008	⚠8-719-024-88	DIODE D1NL20-TR				
D7009	⚠8-719-510-12	DIODE D10SC4M				
D7010	⚠8-719-124-09	DIODE 1S2836-T1				
D7011	⚠8-719-160-68	DIODE RD18FB2				
D7013	⚠8-719-113-35	DIODE RD18ESB2				
D7014	⚠8-719-124-09	DIODE 1S2836-T1				
		<IC>				
IC7001	⚠8-759-069-28	IC PQ05RF11				
IC7002	⚠8-759-198-31	IC uPC1093J-1-T				
IC7010	⚠8-749-921-99	IC SI-3120CA				
		<COIL>				
L7001	⚠1-406-659-11	COIL, CHOKE 10UH				
L7002	⚠1-412-525-31	INDUCTOR 10UH				
		<PHOTO COUPLER>				
PH7001	⚠8-749-010-65	PHOTO COUPLER PC123FY2				
		<IC LINK>				
PS7001	⚠1-533-282-21	LINK, IC				
PS7002	⚠1-533-282-21	LINK, IC				
PS7003	⚠1-533-282-21	LINK, IC				
PS7004	⚠1-533-282-21	LINK, IC				
PS7005	⚠1-533-282-21	LINK, IC				
		<TRANSISTOR>				
Q7001	⚠8-729-230-47	TRANSISTOR 2SA1162-YG-TE85L				
Q7002	⚠8-729-016-15	TRANSISTOR 2SC4833MNP				
Q7003	⚠8-729-016-15	TRANSISTOR 2SC4833MNP				
Q7004	⚠8-729-230-50	TRANSISTOR 2SC2712-YG-TE85L				
Q7005	⚠8-729-230-47	TRANSISTOR 2SA1162-YG-TE85L				
Q7006	⚠8-729-230-47	TRANSISTOR 2SA1162-YG-TE85L				
Q7007	⚠8-729-230-50	TRANSISTOR 2SC2712-YG-TE85L				
Q7008	⚠8-729-230-50	TRANSISTOR 2SC2712-YG-TE85L				
		<RESISTOR>				
R7001	⚠1-202-933-61	FUSIBLE	0.1	10%	1/2W	F
R7002	⚠1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R7003	⚠1-260-128-81	CARBON	270K	5%	1/2W	
R7004	⚠1-260-128-81	CARBON	270K	5%	1/2W	
R7005	⚠1-216-073-91	METAL GLAZE	10K	5%	1/10W	
R7006	⚠1-216-073-91	METAL GLAZE	10K	5%	1/10W	
R7007	⚠1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R7008	⚠1-216-057-91	METAL GLAZE	2.2K	5%	1/10W	
R7009	⚠1-216-097-91	METAL GLAZE	100K	5%	1/10W	
R7010	⚠1-247-783-91	CARBON	10	5%	1/4W	

GB GBA C

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

The componants identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION			REMARK	
R7011	⚠1-260-123-81	CARBON	100K	5%	1/2W	
R7012	⚠1-260-123-81	CARBON	100K	5%	1/2W	
R7013	⚠1-247-771-91	CARBON	3.3	5%	1/4W	
R7014	⚠1-247-783-91	CARBON	10	5%	1/4W	
R7015	⚠1-216-065-91	METAL GLAZE	4.7K	5%	1/10W	
R7016	⚠1-247-771-91	CARBON	3.3	5%	1/4W	
R7018	⚠1-216-113-91	METAL GLAZE	470K	5%	1/10W	
R7019	⚠1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R7020	⚠1-216-659-91	METAL CHIP	2.2K	0.50%	1/10W	
R7021	⚠1-216-683-91	METAL CHIP	22K	0.50%	1/10W	
R7022	⚠1-216-667-91	METAL CHIP	4.7K	0.50%	1/10W	
R7023	⚠1-216-025-91	METAL GLAZE	100	5%	1/10W	
R7024	⚠1-249-387-91	CARBON	3.3	5%	1/4W	F
R7025	⚠1-216-073-91	METAL GLAZE	10K	5%	1/10W	
R7026	⚠1-216-057-91	METAL GLAZE	2.2K	5%	1/10W	
R7027	⚠1-216-065-91	METAL GLAZE	4.7K	5%	1/10W	
R7028	⚠1-216-073-91	METAL GLAZE	10K	5%	1/10W	
R7029	⚠1-216-073-91	METAL GLAZE	10K	5%	1/10W	
R7030	⚠1-216-073-91	METAL GLAZE	10K	5%	1/10W	
R7032	⚠1-216-025-91	METAL GLAZE	100	5%	1/10W	
R7033	⚠1-216-025-91	METAL GLAZE	100	5%	1/10W	
R7051	⚠1-216-033-91	METAL GLAZE	220	5%	1/10W	
R7060	⚠1-216-295-91	CONDUCTOR, CHIP				
R7062	⚠1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R7101	⚠1-216-397-71	METAL OXIDE	4.7	5%	3W	F

<TRANSFORMER>

REF. NO.	PART NO.	DESCRIPTION
T7001	⚠1-427-864-13	TRANSFORMER, CONVERTER (PRT)
T7002	⚠1-429-742-11	TRANSFORMER, CONVERTER (PIT)

GBA BOARD
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<CAPACITOR>

REF. NO.	PART NO.	DESCRIPTION			REMARK
C7201	1-107-824-17	CERAMIC	220PF	5%	1KV
C7202	1-107-824-11	CERAMIC	220PF	5%	1KV
C7203	1-107-889-11	ELECT	220MF	20%	25V
C7204	1-136-165-00	FILM	0.1MF	5%	50V
C7205	1-136-165-00	FILM	0.1MF	5%	50V
C7206	1-163-037-11	CERAMIC CHIP	0.022MF	10%	50V
C7207	1-163-037-11	CERAMIC CHIP	0.022MF	10%	50V
C7208	1-117-219-81	CERAMIC	68PF	5%	1KV
C7209	1-136-538-11	FILM	0.001MF	3%	2KV
C7210	1-136-171-00	FILM	0.33MF	5%	50V
C7211	1-107-877-11	ELECT	1000MF	20%	10V
C7212	1-128-526-11	ELECT	100MF	20%	25V
C7213	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V

<CONNECTOR>

REF. NO.	PART NO.	DESCRIPTION
CN7201	*1-774-245-11	CONNECTOR, BOARD TO BOARD 8P
CN7202	*1-774-244-11	CONNECTOR, BOARD TO BOARD 5P

<DIODE>

REF. NO.	PART NO.	DESCRIPTION
D7201	8-719-911-19	DIODE 1SS119-25
D7202	8-719-109-54	DIODE RD2.2ESB2
D7203	8-719-911-19	DIODE 1SS119-25
D7204	8-719-109-54	DIODE RD2.2ESB2
D7205	8-719-510-64	DIODE S2LA20F
D7206	8-719-031-79	DIODE D5SC4M
D7207	8-719-510-64	DIODE S2LA20F
D7208	8-719-160-68	DIODE RD18FB2

<IC>

REF. NO.	PART NO.	DESCRIPTION
IC7201	8-759-140-85	IC uPC1093J

<IC LINK>

REF. NO.	PART NO.	DESCRIPTION
PS7201	1-532-637-00	LINK, IC (1A/150V)
PS7202	*1-535-303-00	WIRE, JUMPER

<TRANSISTOR>

REF. NO.	PART NO.	DESCRIPTION
Q7201	8-729-032-36	TRANSISTOR 2SC4052MNPR
Q7202	8-729-032-36	TRANSISTOR 2SC4052MNPR

<RESISTOR>

REF. NO.	PART NO.	DESCRIPTION			REMARK	
R7201	1-249-377-11	CARBON	0.47	5%	1/4W	F
R7202	1-249-377-11	CARBON	0.47	5%	1/4W	F
R7203	1-247-889-00	CARBON	270K	5%	1/4W	
R7204	1-247-889-00	CARBON	270K	5%	1/4W	
R7205	1-247-889-00	CARBON	270K	5%	1/4W	
R7206	1-247-889-00	CARBON	270K	5%	1/4W	
R7207	1-216-304-11	METAL GLAZE	3.3	5%	1/10W	
R7208	1-216-304-11	METAL GLAZE	3.3	5%	1/10W	
R7209	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W	
R7210	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R7211	1-216-685-11	METAL CHIP	27K	0.50%	1/10W	
R7212	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R7213	1-249-393-11	CARBON	10	5%	1/4W	F

<TRANSFORMER>

REF. NO.	PART NO.	DESCRIPTION
T7201	1-427-864-11	TRANSFORMER, CONVERTER (PRT)
T7202	1-429-740-11	TRANSFORMER, CONVERTER (PIT)

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* A-1335-073-A C BOARD, COMPLETE
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<CAPACITOR>

REF. NO.	PART NO.	DESCRIPTION			REMARK
C4101	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4102	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4103	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4104	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4105	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4106	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4107	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4108	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C4109	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4110	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4111	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4112	1-124-779-00	ELECT	10MF	20%	16V
C4113	1-126-193-11	ELECT	1MF	20%	50V
C4118	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C4119	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4120	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C4121	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4128	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C4129	1-126-197-11	ELECT	10MF	20%	50V
C4130	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C4131	1-110-501-11	CERAMIC CHIP	0.33MF	10%	16V
C4132	1-110-501-11	CERAMIC CHIP	0.33MF	10%	16V
C4133	1-110-501-11	CERAMIC CHIP	0.33MF	10%	16V
C4134	1-110-501-11	CERAMIC CHIP	0.33MF	10%	16V
C4135	1-110-501-11	CERAMIC CHIP	0.33MF	10%	16V
C4136	1-110-501-11	CERAMIC CHIP	0.33MF	10%	16V
C4137	1-110-501-11	CERAMIC CHIP	0.33MF	10%	16V
C4138	1-110-501-11	CERAMIC CHIP	0.33MF	10%	16V
C4139	1-110-501-11	CERAMIC CHIP	0.33MF	10%	16V
C4140	1-126-204-11	ELECT	47MF	20%	16V

REF. NO.	PART NO.	DESCRIPTION			REMARK
C4141	1-163-037-11	CERAMIC CHIP	0.022MF	10%	50V
C4142	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C4143	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C4144	1-164-346-11	CERAMIC CHIP	1MF		16V
C4145	1-124-779-00	ELECT	10MF	20%	16V
C4146	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C4147	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C4148	1-164-505-11	CERAMIC CHIP	2.2MF		16V
C4149	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C4150	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4151	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4152	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4153	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4154	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4155	1-164-346-11	CERAMIC CHIP	1MF		16V
C4156	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C4157	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C4158	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C4159	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C4160	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4161	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4162	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C4163	1-164-756-11	CERAMIC CHIP	0.0033MF	5%	50V
C4164	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C4165	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C4166	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C4167	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C4168	1-163-231-11	CERAMIC CHIP	15PF	5%	50V
C4169	1-163-231-11	CERAMIC CHIP	15PF	5%	50V
C4170	1-163-231-11	CERAMIC CHIP	15PF	5%	50V
C4171	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C4402	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4403	1-126-204-11	ELECT	47MF	20%	16V
C4404	1-163-163-00	CERAMIC CHIP	18PF	5%	50V
C4405	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C4406	1-164-182-11	CERAMIC CHIP	0.0033MF	10%	50V
C4407	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C4408	1-126-602-11	ELECT	3.3MF	20%	50V
C4409	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C4410	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C4411	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4412	1-163-107-00	CERAMIC CHIP	39PF	5%	50V
C4413	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C4414	1-164-182-11	CERAMIC CHIP	0.0033MF	10%	50V
C4415	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C4416	1-126-602-11	ELECT	3.3MF	20%	50V
C4417	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C4418	1-163-105-00	CERAMIC CHIP	33PF	5%	50V
C4419	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C4420	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C4421	1-126-204-11	ELECT	47MF	20%	16V
C4423	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C4424	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4425	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C4426	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4427	1-164-182-11	CERAMIC CHIP	0.0033MF	10%	50V
C4428	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C4429	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C4430	1-126-602-11	ELECT	3.3MF	20%	50V
C4431	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C4432	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C4433	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C4434	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C4435	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4436	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C4437	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C4438	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C4439	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4441	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4442	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4444	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C4445	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C4446	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C4447	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C4448	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C4449	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C4451	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4452	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C4453	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C4454	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C4455	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C4456	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C4501	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4502	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4503	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4504	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4505	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C4506	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4507	1-126-204-11	ELECT	47MF	20%	16V
C4508	1-126-204-11	ELECT	47MF	20%	16V
C4509	1-126-204-11	ELECT	47MF	20%	16V
C4510	1-126-204-11	ELECT	47MF	20%	16V
C4511	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C4512	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C4513	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C4515	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4516	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4517	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4518	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4519	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4520	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4521	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4522	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4523	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4524	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4525	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4526	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4527	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4528	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4529	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4531	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C4532	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C4533	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C4534	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C4535	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C4536	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C4538	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C4542	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C4543	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C4545	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C4546	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C4547	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4548	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4549	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4550	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4551	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4552	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4553	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C4554	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C4555	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C4556	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C4557	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C4559	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4560	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4561	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4562	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4563	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V

REF. NO.	PART NO.	DESCRIPTION			REMARK
C4564	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C4565	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C4569	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C4570	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C4571	1-164-004-11	CERAMIC CHIP	0.1MF	10%	16V
C4580	1-126-204-11	ELECT	47MF	20%	16V
C4581	1-126-204-11	ELECT	47MF	20%	16V
C4584	1-126-204-11	ELECT	47MF	20%	16V
C4586	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C4589	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C4590	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C4593	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C4594	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C4595	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C4599	1-128-400-11	ELECT	47MF	20%	25V
C4600	1-128-400-11	ELECT	47MF	20%	25V
C4601	1-128-400-11	ELECT	47MF	20%	25V
C4602	1-107-682-11	CERAMIC CHIP	1MF	10%	16V
C4603	1-107-682-11	CERAMIC CHIP	1MF	10%	16V
C4604	1-107-682-11	CERAMIC CHIP	1MF	10%	16V
C4605	1-107-682-11	CERAMIC CHIP	1MF	10%	16V
C4606	1-107-682-11	CERAMIC CHIP	1MF	10%	16V
C4607	1-107-682-11	CERAMIC CHIP	1MF	10%	16V
C4608	1-164-346-11	CERAMIC CHIP	1MF		16V
C4609	1-164-346-11	CERAMIC CHIP	1MF		16V
C4610	1-107-682-11	CERAMIC CHIP	1MF	10%	16V
C4611	1-107-682-11	CERAMIC CHIP	1MF	10%	16V
C4612	1-107-682-11	CERAMIC CHIP	1MF	10%	16V
C4614	1-107-682-11	CERAMIC CHIP	1MF	10%	16V
C4615	1-107-682-11	CERAMIC CHIP	1MF	10%	16V
C4616	1-107-682-11	CERAMIC CHIP	1MF	10%	16V
C4620	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C4621	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C4622	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C4623	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C4624	1-128-400-11	ELECT	47MF	20%	25V
C4625	1-126-204-11	ELECT	47MF	20%	16V
C4626	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C4627	1-126-204-11	ELECT	47MF	20%	16V
C4628	1-126-204-11	ELECT	47MF	20%	16V
C4629	1-126-204-11	ELECT	47MF	20%	16V
C4630	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C4631	1-126-204-11	ELECT	47MF	20%	16V
C4632	1-128-400-11	ELECT	47MF	20%	25V
C4633	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C4634	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C4635	1-126-204-11	ELECT	47MF	20%	16V
C4636	1-128-400-11	ELECT	47MF	20%	25V
C4637	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C4639	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C4640	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C4641	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C4642	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C4643	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C4644	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C4645	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C4647	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C4651	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C4652	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C4654	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5001	1-128-401-11	ELECT	100MF	20%	25V
C5002	1-126-204-11	ELECT	47MF	20%	16V
C5003	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C5004	1-126-204-11	ELECT	47MF	20%	16V
C5005	1-126-204-11	ELECT	47MF	20%	16V
C5006	1-126-204-11	ELECT	47MF	20%	16V
C5007	1-126-204-11	ELECT	47MF	20%	16V
C5009	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5010	1-126-204-11	ELECT	47MF	20%	16V
C5011	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5012	1-128-401-11	ELECT	100MF	20%	25V
C5013	1-128-401-11	ELECT	100MF	20%	25V
C5015	1-126-204-11	ELECT	47MF	20%	16V
C5018	1-109-994-11	CERAMIC CHIP	2.2MF	10%	10V
C5022	1-109-994-11	CERAMIC CHIP	2.2MF	10%	10V
C5025	1-128-401-11	ELECT	100MF	20%	25V
C5026	1-128-401-11	ELECT	100MF	20%	25V
C5035	1-109-994-11	CERAMIC CHIP	2.2MF	10%	10V
C5037	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5038	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C5043	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C5044	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C5051	1-128-401-11	ELECT	100MF	20%	25V
C5052	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5053	1-124-779-00	ELECT	10MF	20%	16V
C5055	1-124-779-00	ELECT	10MF	20%	16V
C5056	1-124-779-00	ELECT	10MF	20%	16V
C5057	1-124-779-00	ELECT	10MF	20%	16V
C5058	1-126-193-11	ELECT	1MF	20%	50V
C5059	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5060	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C5061	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C5062	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C5063	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C5071	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5077	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C5078	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C5079	1-126-205-11	ELECT	47MF	20%	6.3V
C5080	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C5081	1-124-779-00	ELECT	10MF	20%	16V
C5082	1-124-779-00	ELECT	10MF	20%	16V
C5201	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5202	1-164-346-11	CERAMIC CHIP	1MF		16V
C5203	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C5204	1-163-099-00	CERAMIC CHIP	18PF	5%	50V
C5205	1-163-231-11	CERAMIC CHIP	15PF	5%	50V
C5206	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5207	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C5208	1-164-346-11	CERAMIC CHIP	1MF		16V
C5209	1-164-346-11	CERAMIC CHIP	1MF		16V
C5210	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5211	1-164-346-11	CERAMIC CHIP	1MF		16V
C5212	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C5213	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C5214	1-163-231-11	CERAMIC CHIP	15PF	5%	50V
C5215	1-163-231-11	CERAMIC CHIP	15PF	5%	50V
C5216	1-164-346-11	CERAMIC CHIP	1MF		16V
C5217	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C5218	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5219	1-164-346-11	CERAMIC CHIP	1MF		16V
C5220	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C5221	1-164-346-11	CERAMIC CHIP	1MF		16V
C5222	1-164-346-11	CERAMIC CHIP	1MF		16V
C5223	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C5224	1-164-346-11	CERAMIC CHIP	1MF		16V
C5225	1-164-346-11	CERAMIC CHIP	1MF		16V
C5226	1-164-346-11	CERAMIC CHIP	1MF		16V
C5227	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C5228	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C5229	1-164-346-11	CERAMIC CHIP	1MF		16V
C5230	1-164-346-11	CERAMIC CHIP	1MF		16V
C5231	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C5233	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C5234	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5235	1-164-346-11	CERAMIC CHIP	1MF		16V
C5236	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C5237	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V

REF. NO.	PART NO.	DESCRIPTION			REMARK
C5238	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C5239	1-164-346-11	CERAMIC CHIP	1MF		16V
C5240	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5241	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C5242	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C5243	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5247	1-164-346-11	CERAMIC CHIP	1MF		16V
C5248	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C5249	1-164-346-11	CERAMIC CHIP	1MF		16V
C5250	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C5251	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C5252	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C5253	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C5254	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C5255	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C5257	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C5258	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C5261	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C5262	1-164-346-11	CERAMIC CHIP	1MF		16V
C5264	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5265	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5269	1-164-346-11	CERAMIC CHIP	1MF		16V
C5270	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C5273	1-128-401-11	ELECT	100MF	20%	25V
C5274	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C5276	1-107-682-11	CERAMIC CHIP	1MF	10%	16V
C5301	1-128-401-11	ELECT	100MF	20%	25V
C5302	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5303	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5304	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5305	1-128-401-11	ELECT	100MF	20%	25V
C5306	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5307	1-164-346-11	CERAMIC CHIP	1MF		16V
C5308	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5309	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5310	1-126-204-11	ELECT	47MF	20%	16V
C5311	1-126-204-11	ELECT	47MF	20%	16V
C5312	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C5313	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C5314	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C5315	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V

<CONNECTOR>

REF. NO.	PART NO.	DESCRIPTION
CN4101	1-580-789-21	PIN, CONNECTOR (SMD) 6P
CN4401	1-691-093-11	CONNECTOR, FFC (ZIF) 20P
CN4402	1-691-093-11	CONNECTOR, FFC (ZIF) 20P
CN4403	1-691-093-11	CONNECTOR, FFC (ZIF) 20P
CN5001	1-778-372-11	HOUSING, CONNECTOR (PC BOARD)
CN5002	1-778-372-11	HOUSING, CONNECTOR (PC BOARD)
CN5003	1-691-551-11	PIN, CONNECTOR (SMD) 8P
CN5004	1-580-055-21	PIN, CONNECTOR 2P
CN5005	*1-580-056-21	PIN, CONNECTOR (SMD) 3P
CN5006	*1-580-056-21	PIN, CONNECTOR 3P
CN5007	1-695-223-21	PIN, CONNECTOR (SMD) 10P
CN5008	1-778-372-11	HOUSING, CONNECTOR (PC BOARD)
CN5009	1-580-055-21	PIN, CONNECTOR 2P
CN5010	1-569-775-21	PIN, CONNECTOR 5P
CN5011	*1-573-056-21	CONNECTOR, FPC (1.0MM)(ZIF)13P
CN5012	1-569-775-21	PIN, CONNECTOR 5P
CN5013	*1-580-056-21	PIN, CONNECTOR (SMD) 3P

<DIODE>

REF. NO.	PART NO.	DESCRIPTION	REMARK
D4101	8-719-914-43	DIODE DAN202K	
D4102	8-719-914-43	DIODE DAN202K	
D4103	8-719-914-43	DIODE DAN202K	
D4104	8-719-977-03	DIODE DTZ5.6B	
D4105	8-719-977-03	DIODE DTZ5.6B	
D4106	8-719-977-03	DIODE DTZ5.6B	
D4107	8-719-105-38	DIODE RD3.0M-B1	
D4402	8-719-002-81	DIODE 1T363	
D4403	8-719-002-81	DIODE 1T363	
D4404	8-719-002-81	DIODE 1T363	
D4407	8-719-977-49	DIODE DTZ15B	
D4408	8-719-977-49	DIODE DTZ15B	
D4409	8-719-977-49	DIODE DTZ15B	
D4410	8-719-977-49	DIODE DTZ15B	
D4411	8-719-977-49	DIODE DTZ15B	
D4412	8-719-977-49	DIODE DTZ15B	
D4413	8-719-977-49	DIODE DTZ15B	
D4414	8-719-977-49	DIODE DTZ15B	
D4415	8-719-977-49	DIODE DTZ15B	
D4416	8-719-977-49	DIODE DTZ15B	
D4417	8-719-977-49	DIODE DTZ15B	
D4418	8-719-977-49	DIODE DTZ15B	
D4419	8-719-977-49	DIODE DTZ15B	
D4420	8-719-977-49	DIODE DTZ15B	
D4421	8-719-977-49	DIODE DTZ15B	
D4422	8-719-977-49	DIODE DTZ15B	
D4423	8-719-977-49	DIODE DTZ15B	
D4424	8-719-977-49	DIODE DTZ15B	
D4425	8-719-977-49	DIODE DTZ15B	
D4426	8-719-977-49	DIODE DTZ15B	
D4427	8-719-977-49	DIODE DTZ15B	
D4428	8-719-977-49	DIODE DTZ15B	
D4429	8-719-977-49	DIODE DTZ15B	
D4430	8-719-977-49	DIODE DTZ15B	
D4431	8-719-977-49	DIODE DTZ15B	
D4432	8-719-977-49	DIODE DTZ15B	
D5001	8-719-914-43	DIODE DAN202K	
D5002	8-719-914-43	DIODE DAN202K	
D5004	8-719-976-96	DIODE DTZ4.7C	
D5201	8-719-977-03	DIODE DTZ5.6B	
D5202	8-719-914-43	DIODE DAN202K	
D5203	8-719-914-44	DIODE DAP202K	
D5204	8-719-914-43	DIODE DAN202K	
D5205	8-719-914-44	DIODE DAP202K	
D5206	8-719-914-43	DIODE DAN202K	
D5301	8-719-914-43	DIODE DAN202K	

<DELAY LINE>

REF. NO.	PART NO.	DESCRIPTION
DL4101	1-411-456-11	DELAY LINE

<FERRITE BEAD>

REF. NO.	PART NO.	DESCRIPTION
FB4101	1-414-234-11	INDUCTOR, FERRITE BEAD
FB4102	1-414-234-11	INDUCTOR, FERRITE BEAD
FB4103	1-414-234-11	INDUCTOR, FERRITE BEAD
FB4104	1-414-234-11	INDUCTOR, FERRITE BEAD
FB4105	1-414-234-11	INDUCTOR, FERRITE BEAD
FB4106	1-414-234-11	INDUCTOR, FERRITE BEAD
FB4107	1-414-234-11	INDUCTOR, FERRITE BEAD
FB4108	1-414-234-11	INDUCTOR, FERRITE BEAD
FB4109	1-414-234-11	INDUCTOR, FERRITE BEAD
FB4110	1-414-234-11	INDUCTOR, FERRITE BEAD
FB4111	1-414-234-11	INDUCTOR, FERRITE BEAD
FB4112	1-414-234-11	INDUCTOR, FERRITE BEAD
FB4401	1-414-234-11	INDUCTOR, FERRITE BEAD
FB4403	1-414-234-11	INDUCTOR, FERRITE BEAD
FB4404	1-414-234-11	INDUCTOR, FERRITE BEAD
FB5002	1-414-234-11	INDUCTOR, FERRITE BEAD
FB5201	1-414-234-11	INDUCTOR, FERRITE BEAD
FB5202	1-414-234-11	INDUCTOR, FERRITE BEAD
FB5203	1-216-295-91	CONDUCTOR, CHIP
FB5204	1-216-295-91	CONDUCTOR, CHIP

C

REF. NO.	PART NO.	DESCRIPTION	REMARK
FB5205	1-216-295-91	CONDUCTOR, CHIP	
FB5206	1-216-295-91	CONDUCTOR, CHIP	
FB5207	1-216-295-91	CONDUCTOR, CHIP	
FB5208	1-216-295-91	CONDUCTOR, CHIP	
FB5209	1-216-295-91	CONDUCTOR, CHIP	
FB5210	1-216-295-91	CONDUCTOR, CHIP	
FB5211	1-216-295-91	CONDUCTOR, CHIP	

<FILTER>

REF. NO.	PART NO.	DESCRIPTION	REMARK
FL4402	1-239-466-21	FILTER, EMI	
FL4403	1-239-466-21	FILTER, EMI	
FL4408	1-239-400-11	FILTER, CHIP EMI	
FL4409	1-239-400-11	FILTER, CHIP EMI	
FL4410	1-239-400-11	FILTER, CHIP EMI	
FL4411	1-239-400-11	FILTER, CHIP EMI	
FL5001	1-239-400-11	FILTER, CHIP EMI	
FL5002	1-239-466-21	FILTER, EMI	
FL5003	1-239-466-21	FILTER, EMI	
FL5004	1-239-466-21	FILTER, EMI	
FL5005	1-239-466-21	FILTER, EMI	
FL5006	1-239-466-21	FILTER, EMI	
FL5007	1-239-466-21	FILTER, EMI	
FL5008	1-239-400-11	FILTER, CHIP EMI	
FL5012	1-239-466-21	FILTER, EMI	

<IC>

REF. NO.	PART NO.	DESCRIPTION	REMARK
IC4101	8-752-072-88	IC CXA2011Q	
IC4102	8-759-103-09	IC uPC4082G2	
IC4104	8-759-032-43	IC MC74HC157AF-T2	
IC4105	8-759-360-07	IC BA7657F-E2	
IC4106	8-759-285-52	IC PC74HC02D-T	
IC4107	8-759-239-55	IC TC74HC123AF	
IC4401	8-759-103-09	IC uPC4082G2	
IC4402	8-759-290-08	IC JLC1562BFL2	
IC4403	8-752-375-83	IC CXD2412AQ	
IC4404	8-759-103-09	IC uPC4082G2	
IC4501	8-759-064-36	IC MB88346BPFV	
IC4502	8-759-064-36	IC MB88346BPFV	
IC4503	8-759-387-36	IC M62393FP-600D	
IC4504	8-752-075-90	IC CXA1853AQ	
IC4505	8-752-075-90	IC CXA1853AQ	
IC4506	8-752-075-90	IC CXA1853AQ	
IC4507	8-759-510-71	IC BA10358F-E2	
IC5001	8-759-157-17	IC PQ05SZ1U	
IC5002	8-759-259-77	IC PQ20VZ5U	
IC5003	8-759-388-31	IC PQ20VZ1U	
IC5004	8-759-335-28	IC TA78M09F(TE16L)	
IC5005	8-752-053-21	IC CXA1211M	
IC5006	8-759-259-77	IC PQ20VZ5U	
IC5007	8-752-070-54	IC CXA1839Q-T6	
IC5008	8-752-053-21	IC CXA1211M	
IC5009	8-752-072-94	IC CXA1875AM-T4	
IC5011	8-759-984-59	IC MB654842UPF	
IC5012	8-759-300-71	IC HD14053BFP	
IC5014	8-759-100-94	IC uPC358G2	
IC5016	8-759-285-52	IC PC74HC02D-T	
IC5019	8-759-444-11	IC RH5VL51AA-T1	
IC5201	8-759-162-80	IC MM1170BFB	
IC5202	8-759-421-41	IC HD6433337WA08F	
IC5203	8-759-445-10	IC CY7C136-55JC-TEL	
IC5204	8-759-396-82	IC AT28HC64B-90SC-TP	
IC5206	8-759-984-58	IC MB671469PF	
IC5207	8-752-381-91	IC CXD108-143Q	
IC5209	8-759-162-80	IC MM1170BFB	
IC5210	8-759-285-63	IC PC74HC126D-T	
IC5211	8-759-285-51	IC PC74HC00D-T	
IC5212	8-759-285-63	IC PC74HC126D-T	
IC5213	8-759-286-50	IC PC74HC4066D-T	
IC5214	8-759-239-55	IC TC74HC123AF	
IC5215	8-759-286-50	IC PC74HC4066D-T	
IC5301	8-759-286-17	IC PC74HC32D-T	
IC5302	8-759-421-40	IC MB90091APF-SX-1588	
IC5303	8-759-285-51	IC PC74HC00D-T	

<COIL>

REF. NO.	PART NO.	DESCRIPTION	REMARK
L4101	1-216-295-91	CONDUCTOR, CHIP	
L4402	1-427-791-21	TRANSFORMER, DETECTOR	
L4403	1-427-790-21	TRANSFORMER, DETECTOR	
L4404	1-427-792-21	TRANSFORMER, DETECTOR	

<TRANSISTOR>

REF. NO.	PART NO.	DESCRIPTION	REMARK
Q4101	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q4102	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q4103	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q4104	8-729-216-22	TRANSISTOR 2SA1162-G	
Q4105	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q4106	8-729-216-22	TRANSISTOR 2SA1162-G	
Q4107	8-729-216-22	TRANSISTOR 2SA1162-G	
Q4108	8-729-216-22	TRANSISTOR 2SA1162-G	
Q4109	8-729-216-22	TRANSISTOR 2SA1162-G	
Q4110	8-729-216-22	TRANSISTOR 2SA1162-G	
Q4111	8-729-216-22	TRANSISTOR 2SA1162-G	
Q4401	8-729-920-21	TRANSISTOR DTC314TK-T-146	
Q4541	8-729-013-28	TRANSISTOR HN1B01FU-TE85R	
Q4542	8-729-013-28	TRANSISTOR HN1B01FU-TE85R	
Q4543	8-729-013-28	TRANSISTOR HN1B01FU-TE85R	
Q4545	8-729-013-28	TRANSISTOR HN1B01FU-TE85R	
Q4546	8-729-013-28	TRANSISTOR HN1B01FU-TE85R	
Q4547	8-729-013-28	TRANSISTOR HN1B01FU-TE85R	
Q4548	8-729-013-28	TRANSISTOR HN1B01FU-TE85R	
Q4549	8-729-013-28	TRANSISTOR HN1B01FU-TE85R	
Q4550	8-729-013-28	TRANSISTOR HN1B01FU-TE85R	
Q4551	8-729-013-28	TRANSISTOR HN1B01FU-TE85R	
Q4552	8-729-013-28	TRANSISTOR HN1B01FU-TE85R	
Q4553	8-729-013-28	TRANSISTOR HN1B01FU-TE85R	
Q4554	8-729-013-28	TRANSISTOR HN1B01FU-TE85R	
Q4555	8-729-013-28	TRANSISTOR HN1B01FU-TE85R	
Q4556	8-729-013-28	TRANSISTOR HN1B01FU-TE85R	
Q4557	8-729-013-28	TRANSISTOR HN1B01FU-TE85R	
Q4558	8-729-013-28	TRANSISTOR HN1B01FU-TE85R	
Q4559	8-729-013-28	TRANSISTOR HN1B01FU-TE85R	
Q4560	8-729-013-28	TRANSISTOR HN1B01FU-TE85R	
Q4561	8-729-013-28	TRANSISTOR HN1B01FU-TE85R	
Q4562	8-729-013-28	TRANSISTOR HN1B01FU-TE85R	
Q4563	8-729-013-28	TRANSISTOR HN1B01FU-TE85R	
Q4564	8-729-013-28	TRANSISTOR HN1B01FU-TE85R	
Q4565	8-729-013-28	TRANSISTOR HN1B01FU-TE85R	
Q5001	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5002	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q5003	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q5004	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q5007	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5010	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5013	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5016	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q5018	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q5023	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q5025	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q5027	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q5028	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5029	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5031	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q5032	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5034	8-729-216-22	TRANSISTOR 2SA1162-G	

REF. NO.	PART NO.	DESCRIPTION			REMARK
Q5045	8-729-027-59	TRANSISTOR DTC144EKA-T146			
Q5201	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q5202	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q5203	8-729-216-22	TRANSISTOR 2SA1162-G			
Q5204	8-729-027-59	TRANSISTOR DTC144EKA-T146			
Q5205	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q5206	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q5301	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q5302	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q5303	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q5305	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q5306	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q5307	8-729-230-49	TRANSISTOR 2SC2712-YG			
		<RESISTOR>			
R4101	1-216-025-91	METAL GLAZE	100	5%	1/10W
R4102	1-216-025-91	METAL GLAZE	100	5%	1/10W
R4103	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R4104	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W
R4105	1-216-083-00	METAL GLAZE	27K	5%	1/10W
R4106	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R4109	1-216-001-00	METAL GLAZE	10	5%	1/10W
R4110	1-216-133-00	METAL GLAZE	3.3M	5%	1/10W
R4111	1-216-025-91	METAL GLAZE	100	5%	1/10W
R4112	1-216-025-91	METAL GLAZE	100	5%	1/10W
R4113	1-216-025-91	METAL GLAZE	100	5%	1/10W
R4117	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R4118	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R4119	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R4120	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R4121	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R4122	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R4123	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R4124	1-216-033-00	METAL GLAZE	220	5%	1/10W
R4125	1-216-033-00	METAL GLAZE	220	5%	1/10W
R4126	1-216-127-11	METAL GLAZE	1.8M	5%	1/10W
R4127	1-216-041-00	METAL GLAZE	470	5%	1/10W
R4129	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R4130	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R4132	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R4133	1-216-025-91	METAL GLAZE	100	5%	1/10W
R4134	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R4135	1-216-085-00	METAL GLAZE	33K	5%	1/10W
R4136	1-216-075-00	METAL GLAZE	12K	5%	1/10W
R4137	1-216-025-91	METAL GLAZE	100	5%	1/10W
R4138	1-216-025-91	METAL GLAZE	100	5%	1/10W
R4139	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R4140	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R4141	1-216-121-91	METAL GLAZE	1M	5%	1/10W
R4142	1-216-121-91	METAL GLAZE	1M	5%	1/10W
R4143	1-216-025-91	METAL GLAZE	100	5%	1/10W
R4144	1-216-105-91	METAL GLAZE	220K	5%	1/10W
R4145	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R4146	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R4147	1-216-001-00	METAL GLAZE	10	5%	1/10W
R4148	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R4149	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R4150	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R4151	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R4152	1-216-001-00	METAL GLAZE	10	5%	1/10W
R4153	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R4154	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R4155	1-216-121-91	METAL GLAZE	1M	5%	1/10W
R4156	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R4157	1-216-085-00	METAL GLAZE	33K	5%	1/10W
R4158	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R4159	1-216-295-91	CONDUCTOR, CHIP			

REF. NO.	PART NO.	DESCRIPTION			REMARK
R4160	1-216-295-91	CONDUCTOR, CHIP			
R4161	1-216-295-91	CONDUCTOR, CHIP			
R4162	1-216-025-91	METAL GLAZE	100	5%	1/10W
R4163	1-216-025-91	METAL GLAZE	100	5%	1/10W
R4164	1-216-025-91	METAL GLAZE	100	5%	1/10W
R4165	1-216-025-91	METAL GLAZE	100	5%	1/10W
R4166	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W
R4167	1-216-676-11	METAL CHIP	11K	0.50%	1/10W
R4168	1-218-765-11	METAL CHIP	360K	0.50%	1/10W
R4169	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R4170	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R4171	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R4172	1-216-009-00	METAL GLAZE	22	5%	1/10W
R4173	1-216-009-00	METAL GLAZE	22	5%	1/10W
R4174	1-216-009-00	METAL GLAZE	22	5%	1/10W
R4175	1-216-099-00	METAL GLAZE	120K	5%	1/10W
R4201	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R4301	1-216-025-91	METAL GLAZE	100	5%	1/10W
R4401	1-216-295-91	CONDUCTOR, CHIP			
R4402	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R4403	1-216-689-11	METAL GLAZE	39K	5%	1/10W
R4404	1-216-085-00	METAL GLAZE	33K	5%	1/10W
R4405	1-216-121-91	METAL GLAZE	1M	5%	1/10W
R4406	1-216-121-91	METAL GLAZE	1M	5%	1/10W
R4407	1-216-025-91	METAL GLAZE	100	5%	1/10W
R4408	1-216-025-91	METAL GLAZE	100	5%	1/10W
R4409	1-216-025-91	METAL GLAZE	100	5%	1/10W
R4410	1-216-025-91	METAL GLAZE	100	5%	1/10W
R4411	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R4412	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W
R4413	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R4414	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R4415	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R4416	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R4417	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R4418	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R4419	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R4420	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R4421	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R4422	1-216-025-91	METAL GLAZE	100	5%	1/10W
R4423	1-216-025-91	METAL GLAZE	100	5%	1/10W
R4424	1-216-025-91	METAL GLAZE	100	5%	1/10W
R4425	1-216-025-91	METAL GLAZE	100	5%	1/10W
R4426	1-216-025-91	METAL GLAZE	100	5%	1/10W
R4427	1-216-025-91	METAL GLAZE	100	5%	1/10W
R4428	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W
R4429	1-216-079-00	METAL GLAZE	18K	5%	1/10W
R4430	1-216-085-00	METAL GLAZE	33K	5%	1/10W
R4431	1-216-121-91	METAL GLAZE	1M	5%	1/10W
R4432	1-216-121-91	METAL GLAZE	1M	5%	1/10W
R4433	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R4434	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W
R4435	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R4436	1-216-121-91	METAL GLAZE	1M	5%	1/10W
R4437	1-216-121-91	METAL GLAZE	1M	5%	1/10W
R4438	1-216-121-91	METAL GLAZE	1M	5%	1/10W
R4439	1-216-025-91	METAL GLAZE	100	5%	1/10W
R4440	1-216-033-00	METAL GLAZE	220	5%	1/10W
R4441	1-216-033-00	METAL GLAZE	220	5%	1/10W
R4442	1-216-121-91	METAL GLAZE	1M	5%	1/10W
R4443	1-216-121-91	METAL GLAZE	1M	5%	1/10W
R4444	1-216-121-91	METAL GLAZE	1M	5%	1/10W
R4445	1-216-025-91	METAL GLAZE	100	5%	1/10W
R4446	1-216-689-11	METAL GLAZE	39K	5%	1/10W
R4447	1-216-075-00	METAL GLAZE	12K	5%	1/10W
R4448	1-216-085-00	METAL GLAZE	33K	5%	1/10W
R4449	1-216-121-91	METAL GLAZE	1M	5%	1/10W
R4450	1-216-121-91	METAL GLAZE	1M	5%	1/10W

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REF. NO.	PART NO.	DESCRIPTION		REMARK
R4451	1-216-067-00	METAL GLAZE 5.6K	5%	1/10W
R4452	1-216-073-00	METAL GLAZE 10K	5%	1/10W
R4453	1-216-073-00	METAL GLAZE 10K	5%	1/10W
R4454	1-216-295-91	CONDUCTOR, CHIP		
R4455	1-216-295-91	CONDUCTOR, CHIP		
R4456	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R4457	1-216-033-00	METAL GLAZE 220	5%	1/10W
R4462	1-216-025-91	METAL GLAZE 100	5%	1/10W
R4465	1-216-025-91	METAL GLAZE 100	5%	1/10W
R4466	1-216-025-91	METAL GLAZE 100	5%	1/10W
R4467	1-216-025-91	METAL GLAZE 100	5%	1/10W
R4470	1-216-025-91	METAL GLAZE 100	5%	1/10W
R4471	1-216-025-91	METAL GLAZE 100	5%	1/10W
R4472	1-216-025-91	METAL GLAZE 100	5%	1/10W
R4473	1-216-085-00	METAL GLAZE 33K	5%	1/10W
R4474	1-216-019-00	METAL GLAZE 56	5%	1/10W
R4475	1-216-065-00	METAL GLAZE 4.7K	5%	1/10W
R4476	1-216-019-00	METAL GLAZE 56	5%	1/10W
R4477	1-216-025-91	METAL GLAZE 100	5%	1/10W
R4478	1-216-019-00	METAL GLAZE 56	5%	1/10W
R4479	1-216-025-91	METAL GLAZE 100	5%	1/10W
R4480	1-216-019-00	METAL GLAZE 56	5%	1/10W
R4481	1-216-025-91	METAL GLAZE 100	5%	1/10W
R4482	1-216-295-91	CONDUCTOR, CHIP		
R4488	1-216-295-91	CONDUCTOR, CHIP		
R4489	1-216-295-91	CONDUCTOR, CHIP		
R4490	1-216-295-91	CONDUCTOR, CHIP		
R4494	1-216-025-91	METAL GLAZE 100	5%	1/10W
R4495	1-216-295-91	CONDUCTOR, CHIP		
R4496	1-216-295-91	CONDUCTOR, CHIP		
R4497	1-216-295-91	CONDUCTOR, CHIP		
R4498	1-216-295-91	CONDUCTOR, CHIP		
R4501	1-216-025-91	METAL GLAZE 100	5%	1/10W
R4502	1-216-025-91	METAL GLAZE 100	5%	1/10W
R4503	1-216-025-91	METAL GLAZE 100	5%	1/10W
R4504	1-216-085-00	METAL GLAZE 33K	5%	1/10W
R4505	1-216-025-91	METAL GLAZE 100	5%	1/10W
R4507	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R4508	1-216-073-00	METAL GLAZE 10K	5%	1/10W
R4512	1-216-055-00	METAL GLAZE 1.8K	5%	1/10W
R4513	1-216-061-00	METAL GLAZE 3.3K	5%	1/10W
R4514	1-216-081-00	METAL GLAZE 22K	5%	1/10W
R4515	1-216-073-00	METAL GLAZE 10K	5%	1/10W
R4518	1-216-061-00	METAL GLAZE 3.3K	5%	1/10W
R4519	1-216-025-91	METAL GLAZE 100	5%	1/10W
R4520	1-216-025-91	METAL GLAZE 100	5%	1/10W
R4521	1-216-067-00	METAL GLAZE 5.6K	5%	1/10W
R4522	1-216-025-91	METAL GLAZE 100	5%	1/10W
R4523	1-216-025-91	METAL GLAZE 100	5%	1/10W
R4524	1-216-025-91	METAL GLAZE 100	5%	1/10W
R4525	1-216-025-91	METAL GLAZE 100	5%	1/10W
R4526	1-216-085-00	METAL GLAZE 33K	5%	1/10W
R4527	1-216-025-91	METAL GLAZE 100	5%	1/10W
R4528	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R4529	1-216-025-91	METAL GLAZE 100	5%	1/10W
R4530	1-216-025-91	METAL GLAZE 100	5%	1/10W
R4531	1-216-025-91	METAL GLAZE 100	5%	1/10W
R4532	1-216-025-91	METAL GLAZE 100	5%	1/10W
R4534	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R4535	1-216-073-00	METAL GLAZE 10K	5%	1/10W
R4539	1-216-055-00	METAL GLAZE 1.8K	5%	1/10W
R4540	1-216-061-00	METAL GLAZE 3.3K	5%	1/10W
R4541	1-216-081-00	METAL GLAZE 22K	5%	1/10W
R4542	1-216-073-00	METAL GLAZE 10K	5%	1/10W
R4545	1-216-061-00	METAL GLAZE 3.3K	5%	1/10W
R4546	1-216-067-00	METAL GLAZE 5.6K	5%	1/10W
R4547	1-216-085-00	METAL GLAZE 33K	5%	1/10W
R4548	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R4549	1-216-025-91	METAL GLAZE 100	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION		REMARK
R4550	1-216-025-91	METAL GLAZE 100	5%	1/10W
R4551	1-216-025-91	METAL GLAZE 100	5%	1/10W
R4552	1-216-025-91	METAL GLAZE 100	5%	1/10W
R4553	1-216-025-91	METAL GLAZE 100	5%	1/10W
R4555	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R4556	1-216-073-00	METAL GLAZE 10K	5%	1/10W
R4560	1-216-055-00	METAL GLAZE 1.8K	5%	1/10W
R4561	1-216-295-91	CONDUCTOR, CHIP		
R4562	1-216-061-00	METAL GLAZE 3.3K	5%	1/10W
R4563	1-216-081-00	METAL GLAZE 22K	5%	1/10W
R4564	1-216-073-00	METAL GLAZE 10K	5%	1/10W
R4567	1-216-061-00	METAL GLAZE 3.3K	5%	1/10W
R4568	1-216-067-00	METAL GLAZE 5.6K	5%	1/10W
R4569	1-216-025-91	METAL GLAZE 100	5%	1/10W
R4570	1-216-025-91	METAL GLAZE 100	5%	1/10W
R4571	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R4572	1-216-061-00	METAL GLAZE 3.3K	5%	1/10W
R4573	1-216-071-00	METAL GLAZE 8.2K	5%	1/10W
R4575	1-216-029-00	METAL GLAZE 150	5%	1/10W
R4576	1-216-037-00	METAL GLAZE 330	5%	1/10W
R4579	1-216-025-91	METAL GLAZE 100	5%	1/10W
R4581	1-216-025-91	METAL GLAZE 100	5%	1/10W
R4594	1-216-025-91	METAL GLAZE 100	5%	1/10W
R4598	1-216-025-91	METAL GLAZE 100	5%	1/10W
R4646	1-216-295-91	CONDUCTOR, CHIP		
R4647	1-216-295-91	CONDUCTOR, CHIP		
R4651	1-216-017-91	METAL GLAZE 47	5%	1/10W
R4655	1-216-111-91	METAL GLAZE 390K	5%	1/10W
R4656	1-216-111-91	METAL GLAZE 390K	5%	1/10W
R4657	1-216-111-91	METAL GLAZE 390K	5%	1/10W
R4666	1-216-111-91	METAL GLAZE 390K	5%	1/10W
R4667	1-216-111-91	METAL GLAZE 390K	5%	1/10W
R4668	1-216-111-91	METAL GLAZE 390K	5%	1/10W
R4672	1-216-298-00	METAL GLAZE 2.2	5%	1/10W
R4675	1-216-111-91	METAL GLAZE 390K	5%	1/10W
R4676	1-216-111-91	METAL GLAZE 390K	5%	1/10W
R4677	1-216-111-91	METAL GLAZE 390K	5%	1/10W
R4680	1-216-111-91	METAL GLAZE 390K	5%	1/10W
R4681	1-216-111-91	METAL GLAZE 390K	5%	1/10W
R4682	1-216-111-91	METAL GLAZE 390K	5%	1/10W
R4687	1-216-001-00	METAL GLAZE 10	5%	1/10W
R4688	1-216-001-00	METAL GLAZE 10	5%	1/10W
R4694	1-216-001-00	METAL GLAZE 10	5%	1/10W
R4701	1-216-061-00	METAL GLAZE 3.3K	5%	1/10W
R4702	1-216-061-00	METAL GLAZE 3.3K	5%	1/10W
R4703	1-216-061-00	METAL GLAZE 3.3K	5%	1/10W
R4704	1-216-061-00	METAL GLAZE 3.3K	5%	1/10W
R4705	1-216-061-00	METAL GLAZE 3.3K	5%	1/10W
R4706	1-216-061-00	METAL GLAZE 3.3K	5%	1/10W
R4707	1-216-298-00	METAL GLAZE 2.2	5%	1/10W
R4708	1-216-298-00	METAL GLAZE 2.2	5%	1/10W
R4709	1-216-061-00	METAL GLAZE 3.3K	5%	1/10W
R4710	1-216-061-00	METAL GLAZE 3.3K	5%	1/10W
R4711	1-216-298-00	METAL GLAZE 2.2	5%	1/10W
R4712	1-216-298-00	METAL GLAZE 2.2	5%	1/10W
R4713	1-216-298-00	METAL GLAZE 2.2	5%	1/10W
R4714	1-216-298-00	METAL GLAZE 2.2	5%	1/10W
R4715	1-216-061-00	METAL GLAZE 3.3K	5%	1/10W
R4716	1-216-061-00	METAL GLAZE 3.3K	5%	1/10W
R4717	1-216-061-00	METAL GLAZE 3.3K	5%	1/10W
R4718	1-216-061-00	METAL GLAZE 3.3K	5%	1/10W
R4719	1-216-001-00	METAL GLAZE 10	5%	1/10W
R4720	1-216-001-00	METAL GLAZE 10	5%	1/10W
R4721	1-216-298-00	METAL GLAZE 2.2	5%	1/10W
R4722	1-216-298-00	METAL GLAZE 2.2	5%	1/10W
R4723	1-216-061-00	METAL GLAZE 3.3K	5%	1/10W
R4724	1-216-061-00	METAL GLAZE 3.3K	5%	1/10W
R4725	1-216-001-00	METAL GLAZE 10	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION			REMARK
R4726	1-216-298-00	METAL GLAZE	2.2	5%	1/10W
R4727	1-216-298-00	METAL GLAZE	2.2	5%	1/10W
R4728	1-216-298-00	METAL GLAZE	2.2	5%	1/10W
R4729	1-216-298-00	METAL GLAZE	2.2	5%	1/10W
R4730	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R4731	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R4732	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R4733	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R4734	1-216-001-00	METAL GLAZE	10	5%	1/10W
R4735	1-216-001-00	METAL GLAZE	10	5%	1/10W
R4736	1-216-298-00	METAL GLAZE	2.2	5%	1/10W
R4737	1-216-298-00	METAL GLAZE	2.2	5%	1/10W
R4739	1-216-001-00	METAL GLAZE	10	5%	1/10W
R4741	1-216-298-00	METAL GLAZE	2.2	5%	1/10W
R4742	1-216-298-00	METAL GLAZE	2.2	5%	1/10W
R4743	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R4744	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R4745	1-216-001-00	METAL GLAZE	10	5%	1/10W
R4746	1-216-298-00	METAL GLAZE	2.2	5%	1/10W
R4747	1-216-298-00	METAL GLAZE	2.2	5%	1/10W
R4748	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R4749	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R4751	1-216-001-00	METAL GLAZE	10	5%	1/10W
R4752	1-216-001-00	METAL GLAZE	10	5%	1/10W
R4753	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R4754	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R4755	1-216-298-00	METAL GLAZE	2.2	5%	1/10W
R4756	1-216-298-00	METAL GLAZE	2.2	5%	1/10W
R4757	1-216-001-00	METAL GLAZE	10	5%	1/10W
R4758	1-216-298-00	METAL GLAZE	2.2	5%	1/10W
R4759	1-216-298-00	METAL GLAZE	2.2	5%	1/10W
R4760	1-216-001-00	METAL GLAZE	10	5%	1/10W
R4761	1-216-298-00	METAL GLAZE	2.2	5%	1/10W
R4763	1-216-001-00	METAL GLAZE	10	5%	1/10W
R4901	1-216-033-00	METAL GLAZE	220	5%	1/10W
R4902	1-216-033-00	METAL GLAZE	220	5%	1/10W
R5001	1-216-029-00	METAL GLAZE	150	5%	1/10W
R5002	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5003	1-216-041-00	METAL GLAZE	470	5%	1/10W
R5004	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R5005	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5006	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5007	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5008	1-216-041-00	METAL GLAZE	470	5%	1/10W
R5009	1-216-041-00	METAL GLAZE	470	5%	1/10W
R5010	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5011	1-208-817-11	METAL CHIP	30K	0.50%	1/10W
R5012	1-208-801-11	METAL CHIP	6.2K	0.50%	1/10W
R5013	1-216-045-00	METAL GLAZE	680	5%	1/10W
R5014	1-208-775-11	METAL CHIP	510	0.50%	1/10W
R5016	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5019	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5021	1-216-041-00	METAL GLAZE	470	5%	1/10W
R5023	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R5024	1-216-099-00	METAL GLAZE	120K	5%	1/10W
R5025	1-208-801-11	METAL CHIP	6.2K	0.50%	1/10W
R5026	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R5027	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R5028	1-208-775-11	METAL CHIP	510	0.50%	1/10W
R5030	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W
R5031	1-216-656-11	METAL CHIP	1.6K	0.50%	1/10W
R5032	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R5037	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5038	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R5042	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R5043	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R5044	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R5045	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5049	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5054	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5057	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5058	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R5061	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5073	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R5074	1-216-041-00	METAL GLAZE	470	5%	1/10W
R5075	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5076	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W
R5077	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R5078	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R5080	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W
R5081	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R5087	1-216-075-00	METAL GLAZE	12K	5%	1/10W
R5088	1-216-657-11	METAL CHIP	1.8K	0.50%	1/10W
R5094	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R5095	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R5096	1-216-619-11	METAL CHIP	47	0.50%	1/10W
R5097	1-216-619-11	METAL CHIP	47	0.50%	1/10W
R5098	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R5099	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R5100	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5101	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5103	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R5104	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R5105	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R5107	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5108	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R5109	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5110	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R5111	1-216-017-91	METAL GLAZE	47	5%	1/10W
R5112	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5113	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R5114	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R5118	1-216-121-91	METAL GLAZE	1M	5%	1/10W
R5119	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5122	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5123	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5126	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5129	1-216-017-91	METAL GLAZE	47	5%	1/10W
R5132	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R5133	1-216-017-91	METAL GLAZE	47	5%	1/10W
R5136	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5137	1-216-017-91	METAL GLAZE	47	5%	1/10W
R5145	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5146	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5149	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5150	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5151	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5155	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5156	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5168	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5170	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R5171	1-216-687-11	METAL CHIP	33K	0.50%	1/10W
R5172	1-216-656-11	METAL CHIP	1.6K	0.50%	1/10W
R5173	1-208-775-11	METAL CHIP	510	0.50%	1/10W
R5201	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5202	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R5203	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5204	1-216-121-91	METAL GLAZE	1M	5%	1/10W
R5205	1-216-045-00	METAL GLAZE	680	5%	1/10W
R5206	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5207	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5208	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5209	1-216-025-91	METAL GLAZE	100	5%	1/10W
R5210	1-216-017-91	METAL GLAZE	47	5%	1/10W
R5211	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R5212	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R5213	1-216-025-91	METAL GLAZE	100	5%	1/10W

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REF. NO.	PART NO.	DESCRIPTION		REMARK
R5214	1-216-025-91	METAL GLAZE 100	5%	1/10W
R5215	1-216-025-91	METAL GLAZE 100	5%	1/10W
R5216	1-216-073-00	METAL GLAZE 10K	5%	1/10W
R5217	1-216-025-91	METAL GLAZE 100	5%	1/10W
R5218	1-216-025-91	METAL GLAZE 100	5%	1/10W
R5219	1-216-025-91	METAL GLAZE 100	5%	1/10W
R5220	1-216-073-00	METAL GLAZE 10K	5%	1/10W
R5221	1-216-073-00	METAL GLAZE 10K	5%	1/10W
R5222	1-216-025-91	METAL GLAZE 100	5%	1/10W
R5223	1-216-065-00	METAL GLAZE 4.7K	5%	1/10W
R5224	1-216-073-00	METAL GLAZE 10K	5%	1/10W
R5225	1-216-089-91	METAL GLAZE 47K	5%	1/10W
R5226	1-216-041-00	METAL GLAZE 470	5%	1/10W
R5227	1-216-105-91	METAL GLAZE 220K	5%	1/10W
R5228	1-216-105-91	METAL GLAZE 220K	5%	1/10W
R5229	1-216-105-91	METAL GLAZE 220K	5%	1/10W
R5230	1-216-025-91	METAL GLAZE 100	5%	1/10W
R5231	1-216-065-00	METAL GLAZE 4.7K	5%	1/10W
R5301	1-216-073-00	METAL GLAZE 10K	5%	1/10W
R5302	1-216-025-91	METAL GLAZE 100	5%	1/10W
R5304	1-216-025-91	METAL GLAZE 100	5%	1/10W
R5305	1-216-025-91	METAL GLAZE 100	5%	1/10W
R5306	1-216-295-91	CONDUCTOR, CHIP		
R5307	1-216-033-00	METAL GLAZE 220	5%	1/10W
R5308	1-216-033-00	METAL GLAZE 220	5%	1/10W
R5311	1-216-295-91	CONDUCTOR, CHIP		
R5313	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R5314	1-216-089-91	METAL GLAZE 47K	5%	1/10W
R5315	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R5316	1-216-089-91	METAL GLAZE 47K	5%	1/10W
R5317	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R5318	1-216-089-91	METAL GLAZE 47K	5%	1/10W
R5323	1-216-047-91	METAL GLAZE 820	5%	1/10W
R5324	1-216-061-00	METAL GLAZE 3.3K	5%	1/10W
R5325	1-216-061-00	METAL GLAZE 3.3K	5%	1/10W
R5326	1-216-295-91	CONDUCTOR, CHIP		
R5327	1-216-047-91	METAL GLAZE 820	5%	1/10W
R5328	1-216-025-91	METAL GLAZE 100	5%	1/10W
R5329	1-216-115-00	METAL GLAZE 560K	5%	1/10W
R5330	1-216-047-91	METAL GLAZE 820	5%	1/10W
R5331	1-216-061-00	METAL GLAZE 3.3K	5%	1/10W
R5332	1-216-025-91	METAL GLAZE 100	5%	1/10W
R5333	1-216-115-00	METAL GLAZE 560K	5%	1/10W
R5334	1-216-061-00	METAL GLAZE 3.3K	5%	1/10W
R5335	1-216-025-91	METAL GLAZE 100	5%	1/10W
R5336	1-216-115-00	METAL GLAZE 560K	5%	1/10W

<RESISTOR BLOCK>

REF. NO.	PART NO.	DESCRIPTION	REMARK
RB4401	1-236-404-11	NETWORK, RES 220	
RB4402	1-236-404-11	NETWORK, RES 220	
RB4403	1-236-400-11	NETWORK, RES 100	
RB4404	1-236-400-11	NETWORK, RES 100	
RB4405	1-236-400-11	NETWORK, RES 100	
RB4406	1-236-400-11	NETWORK, RES 100	
RB4407	1-236-400-11	NETWORK, RES 100	
RB4501	1-233-576-11	RES, CHIP NETWORK 100	
RB4502	1-233-576-11	RES, CHIP NETWORK 100	
RB4503	1-233-576-11	RES, CHIP NETWORK 100	
RB4504	1-233-576-11	RES, CHIP NETWORK 100	
RB4505	1-233-576-11	RES, CHIP NETWORK 100	
RB4506	1-233-576-11	RES, CHIP NETWORK 100	
RB5001	1-233-576-11	RES, CHIP NETWORK 100	
RB5201	1-236-400-11	NETWORK, RES 100	
RB5202	1-236-424-11	NETWORK, RES 10K	
RB5203	1-236-420-11	NETWORK, RES 4.7K	
RB5204	1-233-412-11	RES, CHIP NETWORK 1.0K	
RB5205	1-236-400-11	NETWORK, RES 100	
RB5206	1-236-420-11	NETWORK, RES 4.7K	
RB5207	1-236-424-11	NETWORK, RES 10K	
RB5208	1-233-576-11	RES, CHIP NETWORK 100	
RB5209	1-236-400-11	NETWORK, RES 100	
RB5210	1-239-409-11	RES, CHIP NETWORK 47	
RB5211	1-233-576-11	RES, CHIP NETWORK 100	
RB5212	1-233-576-11	RES, CHIP NETWORK 100	
RB5213	1-236-400-11	NETWORK, RES 100	
RB5214	1-233-576-11	RES, CHIP NETWORK 100	
RB5215	1-236-400-11	NETWORK, RES 100	
RB5216	1-239-409-11	RES, CHIP NETWORK 47	
RB5217	1-236-424-11	NETWORK, RES 10K	
RB5218	1-239-409-11	RES, CHIP NETWORK 47	
RB5219	1-233-576-11	RES, CHIP NETWORK 100	
RB5220	1-236-424-11	NETWORK, RES 10K	
RB5221	1-233-576-11	RES, CHIP NETWORK 100	
RB5222	1-236-400-11	NETWORK, RES 100	
RB5223	1-236-400-11	NETWORK, RES 100	
RB5301	1-236-400-11	NETWORK, RES 100	
RB5302	1-233-576-11	RES, CHIP NETWORK 100	

<SWITCH>

REF. NO.	PART NO.	DESCRIPTION	REMARK
S5201	1-571-674-11	SWITCH, SLIDE	

<THERMISTOR>

REF. NO.	PART NO.	DESCRIPTION	REMARK
TH5001	1-806-715-11	THERMISTOR	

<CRYSTAL>

REF. NO.	PART NO.	DESCRIPTION	REMARK
X5001	1-767-199-11	VIBRATOR, CRYSTAL	
X5201	1-760-040-11	VIBRATOR, CRYSTAL	
X5202	1-577-349-11	VIBRATOR, CRYSTAL	

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A-1342-317-A V BOARD, COMPLETE
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<CONNECTOR>

REF. NO.	PART NO.	DESCRIPTION	REMARK
CN103	* 1-564-505-11	PLUG, CONNECTOR 2P	

<SWITCH>

REF. NO.	PART NO.	DESCRIPTION	REMARK
S103	1-570-245-11	SWITCH, MICRO	

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A-1373-602-A U BOARD, COMPLETE
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<CONNECTOR>

REF. NO.	PART NO.	DESCRIPTION	REMARK
CN102	1-564-505-11	PLUG, CONNECTOR 2P	

<SWITCH>

REF. NO.	PART NO.	DESCRIPTION	REMARK
S102	1-570-245-11	SWITCH, MICRO	

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REF. NO.	PART NO.	DESCRIPTION	REMARK
	* A-1375-157-A	H BOARD, COMPLETE ****************	
		<CAPACITOR>	
C6003	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C6004	1-124-779-00	ELECT 10MF 20%	16V
C6005	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V
C6006	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C6007	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C6501	1-164-182-11	CERAMIC CHIP 0.0033MF 10%	50V
		<CONNECTOR>	
CN6001	* 1-573-056-21	CONNECTOR, FPC (1.0MM)(ZIF)13P	
		<DIODE>	
D6001	8-719-158-15	DIODE RD5.6SB	
D6002	8-719-158-15	DIODE RD5.6SB	
D6003	8-719-158-15	DIODE RD5.6SB	
D6004	8-719-158-15	DIODE RD5.6SB	
D6005	8-719-158-15	DIODE RD5.6SB	
D6006	8-719-914-43	DIODE DAN202K	
D6007	8-719-914-43	DIODE DAN202K	
D6008	8-719-914-43	DIODE DAN202K	
D6009	8-719-914-43	DIODE DAN202K	
D6010	8-719-914-43	DIODE DAN202K	
D6011	8-719-045-55	DIODE SEC1201C	
D6012	8-719-158-15	DIODE RD5.6SB	
D6013	8-719-158-15	DIODE RD5.6SB	
D6014	8-719-045-60	DIODE SEC1401C	
D6015	8-719-045-53	DIODE SEC1801C	
D6016	8-719-045-53	DIODE SEC1801C	
D6017	8-719-045-53	DIODE SEC1801C	
D6018	8-719-045-53	DIODE SEC1801C	
D6019	8-719-045-53	DIODE SEC1801C	
D6020	8-719-045-53	DIODE SEC1801C	
D6021	8-719-045-53	DIODE SEC1801C	
D6022	8-719-045-53	DIODE SEC1801C	
D6023	8-719-158-15	DIODE RD5.6SB	
D6024	8-719-914-43	DIODE DAN202K	
D6025	8-719-045-53	DIODE SEC1801C	
D6026	8-719-045-53	DIODE SEC1801C	
D6027	8-719-045-53	DIODE SEC1801C	
D6028	8-719-045-53	DIODE SEC1801C	
D6029	8-719-045-53	DIODE SEC1801C	
D6030	8-719-045-53	DIODE SEC1801C	
D6031	8-719-045-61	DIODE SEC1901C	
D6032	8-719-158-15	DIODE RD5.6SB	
D6033	8-719-045-53	DIODE SEC1801C	
D6034	8-719-045-61	DIODE SEC1901C	
D6035	8-719-914-43	DIODE DAN202K	
D6036	8-719-914-43	DIODE DAN202K	
D6037	8-719-914-44	DIODE DAP202K	
D6038	8-719-914-44	DIODE DAP202K	
D6039	8-719-914-44	DIODE DAP202K	
D6040	8-719-158-15	DIODE RD5.6SB	
		<FERRITE BEAD>	
FB6001	1-414-234-11	INDUCTOR, FERRITE BEAD	
		<IC>	
IC6001	8-759-285-18	IC MC68HC05P7BSC402191B	
		<TRANSISTOR>	
Q6001	8-729-027-59	TRANSISTOR DTC144EKA-T146	
Q6002	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q6003	8-729-216-22	TRANSISTOR 2SA1162-G	
Q6004	8-729-216-22	TRANSISTOR 2SA1162-G	
Q6005	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q6006	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q6007	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q6008	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q6009	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q6010	8-729-230-49	TRANSISTOR 2SC2712-YG	
		<RESISTOR>	
R6001	1-216-121-91	METAL GLAZE 1M 5%	1/10W
R6004	1-216-057-00	METAL GLAZE 2.2K 5%	1/10W
R6005	1-216-025-91	METAL GLAZE 100 5%	1/10W
R6006	1-216-097-91	METAL GLAZE 100K 5%	1/10W
R6007	1-216-033-00	METAL GLAZE 220 5%	1/10W
R6008	1-216-081-00	METAL GLAZE 22K 5%	1/10W
R6009	1-216-097-91	METAL GLAZE 100K 5%	1/10W
R6010	1-216-035-00	METAL GLAZE 270 5%	1/10W
R6011	1-216-035-00	METAL GLAZE 270 5%	1/10W
R6012	1-216-035-00	METAL GLAZE 270 5%	1/10W
R6013	1-216-035-00	METAL GLAZE 270 5%	1/10W
R6014	1-216-035-00	METAL GLAZE 270 5%	1/10W
R6015	1-216-035-00	METAL GLAZE 270 5%	1/10W
R6016	1-216-035-00	METAL GLAZE 270 5%	1/10W
R6017	1-216-035-00	METAL GLAZE 270 5%	1/10W
R6018	1-216-025-91	METAL GLAZE 100 5%	1/10W
R6019	1-216-073-00	METAL GLAZE 10K 5%	1/10W
R6020	1-216-025-91	METAL GLAZE 100 5%	1/10W
R6021	1-216-097-91	METAL GLAZE 100K 5%	1/10W
R6022	1-216-073-00	METAL GLAZE 10K 5%	1/10W
R6023	1-216-081-00	METAL GLAZE 22K 5%	1/10W
R6025	1-216-035-00	METAL GLAZE 270 5%	1/10W
R6026	1-216-035-00	METAL GLAZE 270 5%	1/10W
R6027	1-216-035-00	METAL GLAZE 270 5%	1/10W
R6028	1-216-035-00	METAL GLAZE 270 5%	1/10W
R6029	1-216-035-00	METAL GLAZE 270 5%	1/10W
R6030	1-216-035-00	METAL GLAZE 270 5%	1/10W
R6031	1-216-033-00	METAL GLAZE 220 5%	1/10W
R6032	1-216-081-00	METAL GLAZE 22K 5%	1/10W
R6033	1-216-097-91	METAL GLAZE 100K 5%	1/10W
R6034	1-216-073-00	METAL GLAZE 10K 5%	1/10W
R6035	1-216-035-00	METAL GLAZE 270 5%	1/10W
R6036	1-216-033-00	METAL GLAZE 220 5%	1/10W
R6037	1-216-061-00	METAL GLAZE 3.3K 5%	1/10W
R6038	1-216-061-00	METAL GLAZE 3.3K 5%	1/10W
R6039	1-216-061-00	METAL GLAZE 3.3K 5%	1/10W
R6040	1-216-061-00	METAL GLAZE 3.3K 5%	1/10W
R6041	1-216-061-00	METAL GLAZE 3.3K 5%	1/10W
R6042	1-216-061-00	METAL GLAZE 3.3K 5%	1/10W
R6501	1-216-073-00	METAL GLAZE 10K 5%	1/10W
		<RESISTOR BLOCK>	
RB6001	1-233-576-11	RES, CHIP NETWORK 100	
RB6002	1-233-576-11	RES, CHIP NETWORK 100	
RB6003	1-233-576-11	RES, CHIP NETWORK 100	
RB6004	1-233-576-11	RES, CHIP NETWORK 100	
RB6005	1-233-576-11	RES, CHIP NETWORK 100	
		<SWITCH>	
S6001	1-570-909-11	SWITCH, TACTIL (REFLOW TYPE)	
S6002	1-570-909-11	SWITCH, TACTIL (REFLOW TYPE)	
S6003	1-570-909-11	SWITCH, TACTIL (REFLOW TYPE)	
S6004	1-570-909-11	SWITCH, TACTIL (REFLOW TYPE)	
S6005	1-570-909-11	SWITCH, TACTIL (REFLOW TYPE)	

REF. NO.	PART NO.	DESCRIPTION				REMARK
S6006	1-570-909-11	SWITCH, TACTIL (REFLOW TYPE)				
S6007	1-570-909-11	SWITCH, TACTIL (REFLOW TYPE)				
S6008	1-570-909-11	SWITCH, TACTIL (REFLOW TYPE)				
S6010	1-570-909-11	SWITCH, TACTIL (REFLOW TYPE)				
S6011	1-570-909-11	SWITCH, TACTIL (REFLOW TYPE)				
S6012	1-570-909-11	SWITCH, TACTIL (REFLOW TYPE)				
S6013	1-570-909-11	SWITCH, TACTIL (REFLOW TYPE)				
S6014	1-570-909-11	SWITCH, TACTIL (REFLOW TYPE)				
S6015	1-570-909-11	SWITCH, TACTIL (REFLOW TYPE)				
S6016	1-570-909-11	SWITCH, TACTIL (REFLOW TYPE)				
		<CRYSTAL>				
X6001	1-760-496-21	VIBRATOR, LITHIUM NIOBATE				

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*A-1390-662-A NR BOARD, COMPLETE
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REF. NO.	PART NO.	DESCRIPTION				REMARK
		<CAPACITOR>				
C4801	1-126-191-11	ELECT	0.47MF	20%	50V	
C4802	1-126-191-11	ELECT	0.47MF	20%	50V	
C4803	1-164-346-11	CERAMIC CHIP	1MF		16V	
C4804	1-164-346-11	CERAMIC CHIP	1MF		16V	
C4805	1-109-994-11	CERAMIC CHIP	2.2MF	10%	10V	
C4806	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C4807	1-124-779-00	ELECT	10MF	20%	16V	
C4808	1-126-205-11	ELECT	47MF	20%	6.3V	
C4809	1-124-779-00	ELECT	10MF	20%	16V	
C4810	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C4811	1-126-204-11	ELECT	47MF	20%	16V	
C4812	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C4814	1-163-005-11	CERAMIC CHIP	470PF	10%	50V	
C4815	1-109-994-11	CERAMIC CHIP	2.2MF	10%	10V	
		<CONNECTOR>				
CN4801	1-764-643-21	PIN, CONNECTOR (SMD) 11P				
		<DIODE>				
D4801	8-719-977-20	DIODE DTZ8.2B				
D4802	8-719-977-20	DIODE DTZ8.2B				
D4803	8-719-977-20	DIODE DTZ8.2B				
D4804	8-719-800-76	DIODE 1SS226				
D4805	8-719-800-76	DIODE 1SS226				
D4806	8-719-800-76	DIODE 1SS226				
D4807	8-719-159-85	DIODE RD2.0MB				
D4808	8-719-914-43	DIODE DAN202K				
		<IC>				
IC4801	8-759-983-69	IC LM358PS				
IC4802	8-749-011-05	IC GP1U28X				
IC4803	8-759-285-61	IC PC74HC123D-T				
		<JACK>				
J4801	1-565-838-11	JACK BLOCK, PIN 2P				
J4802	1-563-935-11	JACK, STEREO HEADPHONE				
J4803	1-563-935-11	JACK, STEREO HEADPHONE				
J4804	1-563-935-11	JACK, STEREO HEADPHONE				
		<COIL>				
L4801	1-412-363-21	INDUCTOR 0UH				
L4802	1-412-363-21	INDUCTOR 0UH				
L4803	1-412-363-21	INDUCTOR 0UH				
L4804	1-412-363-21	INDUCTOR 0UH				
L4805	1-412-363-21	INDUCTOR 0UH				
L4806	1-412-363-21	INDUCTOR 0UH				
L4807	1-412-363-21	INDUCTOR 0UH				
		<TRANSISTOR>				
Q4801	8-729-216-22	TRANSISTOR 2SA1162-G				
Q4803	8-729-216-22	TRANSISTOR 2SA1162-G				
Q4805	8-729-027-59	TRANSISTOR DTC144EKA-T146				
Q4806	8-729-027-59	TRANSISTOR DTC144EKA-T146				
Q4807	8-729-230-49	TRANSISTOR 2SC2712-YG				
Q4808	8-729-027-59	TRANSISTOR DTC144EKA-T146				
Q4809	8-729-230-49	TRANSISTOR 2SC2712-YG				
Q4810	8-729-230-49	TRANSISTOR 2SC2712-YG				
		<RESISTOR>				
R4801	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R4802	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R4803	1-216-308-00	METAL GLAZE	4.7	5%	1/10W	
R4804	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R4805	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R4806	1-216-097-91	METAL GLAZE	100K	5%	1/10W	
R4807	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R4808	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R4809	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R4810	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R4811	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R4812	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R4813	1-216-097-91	METAL GLAZE	100K	5%	1/10W	
R4814	1-216-097-91	METAL GLAZE	100K	5%	1/10W	
R4815	1-216-091-00	METAL GLAZE	56K	5%	1/10W	
R4816	1-216-097-91	METAL GLAZE	100K	5%	1/10W	
R4817	1-216-091-00	METAL GLAZE	56K	5%	1/10W	
R4818	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R4819	1-216-148-00	METAL GLAZE	8.2	5%	1/8W	
R4820	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R4821	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R4822	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R4823	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R4824	1-216-017-91	METAL GLAZE	47	5%	1/10W	
R4825	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R4826	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R4827	1-216-017-91	METAL GLAZE	47	5%	1/10W	
R4828	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R4829	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R4830	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R4831	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R4832	1-216-075-00	METAL GLAZE	12K	5%	1/10W	
R4833	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R4834	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R4835	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R4836	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R4837	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R4841	1-216-097-91	METAL GLAZE	100K	5%	1/10W	
R4842	1-216-113-00	METAL GLAZE	470K	5%	1/10W	

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*A-1390-664-A NF BOARD, COMPLETE
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REF. NO.	PART NO.	DESCRIPTION				REMARK
		<CAPACITOR>				
C4007	1-126-205-11	ELECT	47MF	20%	6.3V	

The componants identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite.
Ne les remplacer que par une piece portant le numero specifie.

NF

<CONNECTOR>

REF. NO.	PART NO.	DESCRIPTION	REMARK
CN4001	*1-564-506-11	PLUG, CONNECTOR 3P	

<IC>

REF. NO.	PART NO.	DESCRIPTION	REMARK
IC4001	8-747-905-11	IC SBX1790-51	

<RESISTOR>

REF. NO.	PART NO.	DESCRIPTION	REMARK
R4001	1-216-025-91	METAL GLAZE 100 5%	1/10W
R4002	1-216-017-91	METAL GLAZE 47 5%	1/10W

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MISCELLANEOUS

REF. NO.	PART NO.	DESCRIPTION	REMARK
	1-473-848-21	OPTICAL UNIT	
	1-505-398-11	SPEAKER (7X4CM)	
	⚠1-557-377-11	CORD, POWER (3 CORE) (VPL-W400Q)	
	⚠1-590-910-11	CORD SET, POWER (VPL-W400QM)	
	1-566-316-11	CONNECTOR, CONVERSION	
	1-698-818-11	FAN, DC	
	1-698-819-11	FAN, DC	
	1-900-222-35	CONNECTOR ASSY, FLAT 13P	
	1-900-222-43	CONNECTOR ASSY, LAMP SOCKET	
	1-900-226-08	CONNECTOR ASSY, MICRO 3P	

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ACCESSORIES AND PACKING MATERIALS

REF. NO.	PART NO.	DESCRIPTION	REMARK
	1-566-316-11	CONNECTOR, CONVERSION	
	3-858-360-11	MANUAL, INSTRUCTION	
	3-858-360-21	MANUAL, INSTRUCTION (VPL-W400QM)	
	3-858-360-31	MANUAL, INSTRUCTION (VPL-W400QM)	
	1-473-826-11	REMOTE COMMANDER	
	1-557-377-11	CORD, POWER (3 CORE)	
	*4-053-995-01	CUSHION (UPPER) (ASSY)	
	*4-053-996-01	CUSHION (LOWER) (ASSY)	
	*4-055-464-01	INDIVIDUAL CARTON	

REMOTE COMMANDER

REF. NO.	PART NO.	DESCRIPTION	REMARK
	1-473-826-11	REMOTE COMMANDER (RM-PJM500)	
	9-939-483-01	COVER, BATTERY	

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ACCESSORIES AND PACKING MATERIALS (PSS-500)

REF. NO.	PART NO.	DESCRIPTION	REMARK
	3-858-084-01	MANUAL, INSTRUCTION	
	4-047-742-01	NUT (M8), HEXAGON	
	4-047-743-01	WASHER, TOOTHED LOCK	
	4-047-744-01	PIN	
	4-047-746-01	BOLT (M8X50), HEXAGON	
	4-047-765-01	SCREW (M4X6), +P	
	4-047-903-01	PIN, SNAP	
	4-055-228-11	BOLT (M6X35), HEXAGON	
	4-055-229-11	WASHER (M6), PLAIN	
	4-055-230-11	WASHER (M6), LOCK SPRING	

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ACCESSORIES AND PACKING MATERIALS (PK-PJ500)

REF. NO.	PART NO.	DESCRIPTION	REMARK
	3-858-065-01	MANUAL, INSTRUCTION	
	*3-715-526-01	WASHER (M3)	
	4-054-855-01	SCREW (+PWH M3X10), MACHINE	
	4-396-203-01	SCREW (+B M3X12), PREVENTION	
	7-682-561-04	SCREW +P 4X8	
	7-684-024-04	N 4, TYPE 2	
	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	
	7-685-648-79	SCREW +BVTP 3X12 TYPE2 IT-3	